

ECO HEATING SYSTEM

OUTDOOR UNIT

HYDRO UNIT

Model: AEX160EDEHA

AEX140EDEHA

AEX125EDEHA

AEX160EDGHA

AEX140EDGHA

AEX125EDGHA AEX100EDEHA

AEX060EDEHA

AEN160YDEHA AEN160YDGHA AEN080YDEHA

SERVICE Manual

ECO HEATING SYSTEM



CONTENTS

- 1. Precautions
- 2. Product Specifications
- 3. Disassembly and Reassembly
- 4. Troubleshooting
- 5. PCB Diagram
- 6. Wiring Diagram
- 7. Schematic Diagram
- 8. Reference Sheet

Refer to the service manual in the GSPN(see the rear cover) for the more information.

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Contents

١.	Precautions	
	1-1 Precautions for the Service	3
	1-2 Precautions related to static electricity and PL	3
	1-3 Precautions for the Safety	2
	1-4 Precautions for handling a system containing refrigerants	
	1-5 Precautions for the brazing	
	1-6 Precautions for charging refrigerants	
2.	General Overview	6
	2-1 Features of the System	
	2-1-1 Key features of the EHS(SPLIT)	
	2-2 Product Specifications	
	2-2-1 Outdoor Unit	
	2-3 Specifications of optional items	
	2-3-1 Accessories	11
3.	Disassembly and Reassembly	12
	3-1 Hydro unit	13
	3-2 Outdoor Unit	2
4.	Troubleshooting	37
	4-1 Wired remote controller	37
	4-2 Troubleshooting by symptoms	40
	4-2-1 Communication error after finishing Tracking	40
	4-2-2 EEPROM circuit failure	4
	4-3 Hydro unit(Mono)	42
	4-3-1 EEPROM error	42
	4-3-2 $\textit{EE53}$: Error due to abnormal data of Wired remote controller thermistor value	43
	4-3-3 £ 🖫 🗗 : Error due to abnormal data of Water outlet thermistor value	44
	4-3-4 \textit{EGUY} : Error due to abnormal data of DHW tank thermistor value	45
	4-3-5 Water pump & flow switch OFF	46
	4-3-6 Water pump & flow switch ON	47
	4-3-7 Hydro unit temperature sensor(open/short)	48
	4-3-8 Communication error after finishing Tracking (Hydro unit)	49
	4-4 Items to check before diagnostics	50
	4-4-1 Test run mode and view mode	50
	1-1-2 Troubleshooting for outdoor unit	5

Contents

	4-5 Troubleshooting by symptoms	53
	4-5-1 Communication error after finishing tracking (E202)	53
	4-5-2 Time out (1min.) of communication error between MAIN PBA and INV. PBA (E203)	54
	4-5-3 Temperature sensor error (E221, E231, E251, E320)	55
	4-5-4 Fan error (E458, E475)	56
	4-5-5 Compressor error (E461, E467)	58
	4-5-6 Current trip error (E462, E463)	59
	4-5-7 IPM(IGBT module) over current error (E464)	60
	4-5-8 DC-link voltage under/over error (E466)	62
	4-5-9 GAS leak error(E554)	63
	4-5-10 The other errors	64
	4-5-11 In case of heating at the cooling mode or coolin g at the heating mode	65
	4-5-12 Outdoor unit is not powered on – Initial diagnosis	67
	4-5-13 Outdoor unit power supply error	68
5.	PCB Diagram	
	5-1 Hydro unit	69
	5-2 Outdoor Unit	70
	5-3 Parts List	75
5.	Wiring Diagram	89
•	6-1 Hydro unit	
	6-2 Outdoor Unit	
		> 0
_		
/ .	Schematic Diagram	
	7-1 Hydro unit	
	7-2 Outdoor Unit	94
3.	Reference Sheet	95
	8-1 Index for Model Name	95
	8-1-1 Outdoor Unit	
	8-2 Refrigerant Circuit Diagram	96

1. Precautions

1-1 Precautions for the Service

- Use the standard parts when replacing the electric parts.
 - Confirm the model name, rated voltage, rated current of the electric parts.
- When repairing the equipment, connection of the harness parts must be firm and solid.
 - A loose connection may cause noise or other malfunction.
- When assembling and disassembling the equipment while it is laid down, lay it on soft cloth.
 - Otherwise it may scratch the back of the exterior of the product.
- Remove dust or dirt completely from the housing block, wiring block and service parts during repair.
 - This helps prevent the danger of fire caused by tracking or short circuit.
- Fasten the valve caps of service valves and charging valves of outdoor unit as much as possible using adjustable wrenches.
- Check the status of the components' assembly after repair service.
 - The status must be the same as before the repair service.

1-2 Precautions related to static electricity and PL

- The PCB power supply block is susceptible to static electricity. Therefore, care must be taken during repair or measuring while the power is on.
 - Wear insulation gloves for PCB repair or measuring.
- Check whether the installation location is at least two meters away from other electronic products such as TV, video, or
 - Otherwise, the video quality might be degraded or noise might be generated.
- Do not let end users repair the products themselves.
 - Unauthorized disassembly might cause electric shock or fire.

1-3 Precautions for the Safety

- Do not pull any electric wires and do not touch an auxiliary power switch with a wet hand.
 - There is a danger of electric shock or fire.
- In case any wire or power plug has been damaged, replace it to eliminate any possible danger.
- Do not bend the power cord by force and do not put any heavy object on the power cord.
 - There is a danger of electric shock or fire.
- Do not use multi socket.
 - There is a danger of electric shock or fire.
- Ground the product if necessary.
 - Be sure to ground the product if there is any danger of electric leakage due to water or moisture.
- Be sure to turn off the auxiliary power switch or pull out the power plug during replacement or repair of electric parts.
 - There is a danger of electric shock.
- In case the product will not be in use for a long time, the battery of remote control should be kept separately.
 - Leakage of inside fluid can cause break down of remote control.
- The installation must be done by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard.
 - Installation by an unqualified person may cause a water leakage, electric shock or fire and so on.
- The electric work must be done by service agent or similarly qualified persons according to national wiring regulations and use only rated cable.
 - If the capacity of the power cable is insufficient or electric work is not properly completed, electric shock or fire may occur.
- Use only rated parts and tools.
 - If you don't use the rated parts and tools, it can cause trouble with the air conditioner and bring about injury.
- If any gas or impurities except R410A refrigerant come into the refrigerant pipe, serious problem may occur and it may cause injury.
- Leak test must be done using only Nitrogen(NO₂)gas.
 - R410A refrigerant is used for EHS.
 - When using R410A, moisture or foreign substances may affect to the capacity and reliability of the product. Safety precautions must be taken when installing the refrigerant pipe.
 - The design pressure of the unit is 4.1MPa. Select appropriate material and thickness according to the regulations.
 - R410A is a quasi-azeotrope of two refrigerants.
 - Make sure to charge liquid one when adding refrigerant.
 - If you charge gaseous refrigerant, it may affect the capacity and reliability of the product as a result of change formation of the refrigerant.

1-4 Precautions for handling a system containing refrigerants

All system containing refrigerants shall be removed under regional regulations prior to the disposal to prevent the potential health and environmental consequences.

Harmful for human body

– When emitted liquid refrigerant contacts human body, contacted area may get frostbite, blister or become numb.

If refrigerant leaks in airtight area, lack of oxygen may cause suffocation. When refrigerant is heated, it may generate harmful gas.

Precautions for handling container

- Do not apply shock or heat to the refrigerant container.

1-5 Precautions for the brazing

- Clear any dangerous or inflammable materials in surrounding environment.
- Make sure to empty the remaining refrigerant in the product or pipe before brazing.
 - Brazing with the refrigerant still remaining in the product or pipe may cause poor result and generate harmful gas. Furthermore, pressure of the refrigerant may increase and cause damage to the leaking part. This may lead harmful refrigerant and oil to spurt out which can be dangerous for service personnel.
- Use nitrogen gas to get rid of the oxide forming during brazing.
 - Using other type of gas may cause damage to the product or the exterior.

1-6 Precautions for charging refrigerants

- Add quantity of the refrigerant using a scale and perform a test operation with S-net.
 - Product performance may decrease if you add excessive amount of refrigerant.
- Do not charge refrigerants while heating the container up.
 - The container may get damaged by the heat and result in explosions.
- Do not operate the product without pressure switch(for product protection) and sensor.
 - If there are any internal blockage, high refrigerant pressure increase may damage the product or exterior.

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2. General Overview

2-1 Features of the System

POWER SAVING

EHS(Eco Heating System) considers the trend in air conditioner use. It optimizes the energy efficiency of loads ranging from partial to full. It achieves an excellent energy effect for the users of the air conditioner.

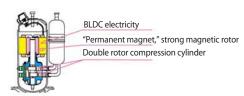
Samsung patented compressor

Samsung has been researching and developing compressors since the 70's.

It has developed power saving compressors for more than thirty years.

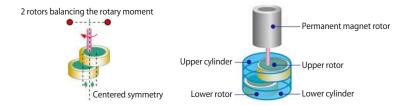
The **EHS(Eco Heating System)** compressor adopts a double-rotor BLDC compressor with permanent magnets made by Samsung. Electricity for the compressor rotor is obtained from a neodium-iron-boron permanent magnetic material (boron magnet can attract iron material weighing 1000 times its own weight.) It strengthens the rotary moment of the compressor to maximize the entire efficiency of the compressor.







SAMSUNG's double-rotor compressor has the upper and lower rotors designed symmetrically. The double rotor in symmetry can remove vibrations caused by the eccentric design of the cylinder.



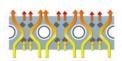
High efficiency heat exchanger

EHS(Eco Heating System) uses new multiple-teeth screw pipes with a diameter of 8 mm to improve the heat exchangeability of the pipe by **30.8%**

The water-friendly aluminum foil in the heat exchanger uses the G-fin patent design to improve the efficiency of heat exchange by 13%.



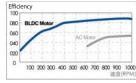




DC fan electricity

The **EHS(Eco Heating System)** outdoor machine uses DC fan electricity. The rotational speed of electricity is 100 RPM to 1050 RPM with step-free control. The electrical efficiency is improved by about **33%** compared to AC electricity.



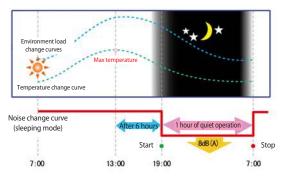


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Quiet night

EHS(Eco Heating System)'s outdoor machine can be set to quiet nighttime operation mode. The outdoor machine executes quiet operation (sleeping mode) after six hours. After 12 hours, it returns to the previous mode automatically.



2-1-1 Key features of the EHS(SPLIT)

■ Easy installation

No need to install the refrigerant lines in the system. Users can run the system after connecting water pipes only.

■ Integrated Heating & Cooling system

Plate Heat exchanger is a integral part in heating & cooling system. For user's convenience, PHE is integrated into the system. This concept will help space saving and lower costs for pipe line reduction.

■ Running Costs-Reduction of Up to 33.3%

Samsung EHS, known for its world class efficiency (12kW floor heating system with COP of 4.60), can reduce 33.3% of your running costs as compared to a gas boiler.

■ High Performance at Low Temperature

Samsung EHS is made up of an inverter compressor optimally operated according to the outdoor temperature, offering heating performance of 90% at -10°C and reliable frost protection at -20°C.

2-2 Product Specifications

2-2-1 Outdoor Unit

ltem —			AEX160EDGHA	AEX140EDGHA	AEX125EDGHA	
item				3phase 16kW	3phase 14kW	3phase 12.5kW
ı	mage	Outdoor un	it			
		Heating 1	W	16,000	14,000	12,500
		Heating 2	W	15,000	13,000	11,500
Capa	acity (95%†)	Cooling 1	W	17,400	16,200	15,000
		Cooling 2	W	13,300	12,300	11,300
		Heating 1	W	3,720	3,110	2,660
POWER C	CONSUMPTION	Heating 2	W	4,410	3,710	3,195
(1	110%↓)	Cooling 1	W	6,000	5,150	4,350
		Cooling 2	W	5,420	4,730	4,110
		Heating 1	А	5.8	4.9	4.2
Runni	ing Current	Heating 2	А	6.9	5.8	5.0
(1	110%↓)	Cooling 1	А	9.4	8.1	6.8
		Cooling 2	А	8.5	7.4	6.4
Pow	er Supply		Ø,V,Hz	3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
		Heating 1	W/W	4.30	4.50	4.70
COR	EED (050/ +)	Heating 2	W/W	3.40	3.50	3.60
COP/	/EER (95%†)	Cooling 1	W/W	2.90	3.15	3.45
		Cooling 2	W/W	2.45	2.60	2.75
Refrigerant Charge			g, type	2,800 R410A	2,800 R410A	2,800 R410A
		Net	mm	940X1,420X330	940X1,420X330	940X1,420X330
Set Dimensions (W*H*D)		Gross	mm	995X1,548X426	995X1,548X426	995X1,548X426
	νν 11 <i>D)</i>	Weight (Net/Gross)	kg	98 / 108	98 / 108	98 / 108
Noise	Cooling	Cond.1/2	dB(A)	61	60	59
Noise	Heating	Cond.1/2	dB(A)	60	59	59
Op	peration	Cooling	${\mathbb C}$	10~46	10~46	10~46
	range	Heating	$^{\circ}$	-20~35	-20~35	-20~35

Product Specifications (cont.)

				AEX160EDEHA	AEX140EDEHA	AEX125EDEHA	AEX100EDEHA	AEX060EDEHA
	ltem		1phase 16kW	1phase 14kW	1phase 12.5kW	1phase 10kW	1phase 5.8kW	
lma	ge	Outdoor	unit					
		Heating 1	W	16,000	14,000	12,500	10,000	5800
C	(OFO(A)	Heating 2	W	15,000	13,000	11,500	9,500	5300
Capacity	r (95%⊺)	Cooling 1	W	17,400	16,200	15,000	9,100	6670
		Cooling 2	W	13,300	12,300	11,300	7,100	4900
		Heating 1	W	3,720	3,110	2,660	2,220	1220
POW CONSUM		Heating 2	W	4,410	3,710	3,195	2,750	1490
(1109		Cooling 1	W	6,000	5,150	4,350	2,890	1905
		Cooling 2	W	5,420	4,730	4,110	2,730	1810
		Heating 1	А	16.3	13.7	11.7	9.7	5.7
Running	Current	Heating 2	А	19.4	16.3	14.0	12.1	7.0
(1109	%↓)	Cooling 1	А	26.4	22.6	19.1	12.7	8.8
		Cooling 2	А	23.8	20.8	18.1	12.0	8.1
Power 9	Supply		Ø,V,Hz	1 / 220-240 / 50	1 / 220-240 / 50	1 / 220-240 / 50	1 / 220-240 / 50	1 / 220-240 / 50
		Heating 1	W/W	4.30	4.50	4.70	4.50	4.75
COD/EED	(O50/A)	Heating 2	W/W	3.40	3.50	3.60	3.45	3.56
COP/EER	(95%1)	Cooling 1	W/W	2.90	3.15	3.45	3.15	3.5
		Cooling 2	W/W	2.45	2.60	2.75	2.60	2.7
Refrigerant Charge			g, type	2,800 R410A	2,800 R410A	2,800 R410A	2,000 R410A	1,200 R410A
		Net	mm	940X1,420X330	940X1,420X330	940X1,420X330	940X998X330	880X638X310
Set Dimensions (W*H*D)		Gross	mm	995X1,548X426	995X1,548X426	995X1,548X426	995X1,096X426	1024X750X414
		Weight (Net/Gross)	kg	98 / 108	98 / 108	98 / 108	74 / 82	48 / 53
Noise	Cooling	Cond.1/2	dB(A)	61	60	59	59	54
14013€	Heating	Cond.1/2	dB(A)	60	59	59	57	53
Opera	ation	Cooling	\mathbb{C}	10~46	10~46	10~46	10~46	10~46
ran	ge	Heating	C	-20~35	-20~35	-20~35	-20~35	-20~35

NO	DIVISION		UNIT	AEN160YDGHA	AEN160YDEHA	AEN080YDEHA
1	POWER SOURCE		V/Hz	3P, 380-415~, 50Hz	1P, 220-240V~, 50Hz	1P, 220-240V~, 50Hz
2		"POWER CONSUMPTION (Pump 3 Step, 110%↓)"		151	151	132
3	"Running Current (Pump 3 Step, 110%↓)"	А	0.234	0.691	0.604
4	"MAX Current (Pump 3 Step+Backup Heate	r 2 Step)"	Α	9.55	28.2	18.9
5	Sound Pressure	Cooling	dB(A)	35	35	35
,	Souria Flessure	Heating	dB(A)	35	35	35
_	"Dimensions	Net	mm	850 x 510 x 315	850 x 510 x 315	850 x 510 x 315
6	(WxHxD)"	Gross	mm	1024 x 412 x 564	1024 x 412 x 564	(1024x426x564)
_		Net	kg	48	48	45
7	Weight	Gross	kg	58	58	55
_	"Connecting Pipe	Liquid	Inch	3/8"	3/8"	3/8"
8	[Refrigerant]"	Gas	Inch	5/8"	5/8"	5/8"
_	"Connecting Pipe	Liquid	Inch	BSPP male 1 1/4"	BSPP male 1 1/4"	BSPP male 1 1/4"
9	[Water]"	Gas	Inch	BSPP male 1 1/4"	BSPP male 1 1/4"	BSPP male 1 1/4"
10	Remote Controller		CODE	DB93-09348A	DB93-09348A	DB93-09348A
		for Hydro unit	-	SG-52NH, 40A	SG-52NH, 40A	SG-52NH, 30A
11	ELCB	for DHW tank	-	SG-52NH, 20A	SG-52NH, 20A	SG-52NH, 20A
12	Magnet Contactor	Spec.	-	CMC-25C,2P, 3EA, 25A	CMC-25C,2P, 3EA, 25A	CMC-25C,2P, 3EA, 25A
		Model name	-	RS 25/8	RS 25/8	RS 25/7
13	Water Pump	Input	W	200	200	180
		Running Current	Α	0.76	0.76	0.76
		Туре	-	Brazing plate	Brazing plate	Brazing plate
14	Heat Exchanger	No. of Plate	ea	72	72	48
		Туре	-	Sheath	Sheath	Sheath
		Input power	W	6,000	6,000	4,000
15	Electric Heater	Thermostat	°C	65	65	65
		Thermal Fuse	°C	94	94	94
16	Flow Switch	Set Point	LPM	16 ± 1.5	16 ± 1.5	12 ± 1.5
	"Expansion	Type	-	SBR, diaphram	SBR, diaphram	SBR, diaphram
17	Vessel"	Volume	Liter	8.0	8.0	8.0
		Size	Inch	BSPP male 1/2"	BSPP male 1/2"	BSPP male 1/2"
18	Pressure Relief valve	Relief Pressure	bar	2.9	2.9	2.9
19	Air purge valve	Size	Inch	BSPP male 3/8"	BSPP male 3/8"	BSPP male 3/8"
20	Service valve (附件)	Size	Inch	BSPP male 1 1/4"	BSPP male 1 1/4"	BSPP male 1 1/4"
21	Total Water Volume		Liters	5.5	5.5	5.0

2-3 Specifications of optional items

2-3-1 Accessories

Item	Description	Code No.	Q'ty	Remark
	Cap Drain	DB63-10355C	3	
	Drain Plug	DB67-00806A	1	
	Rubber Leg	DB73-20134A	4	Essential Offer (Outdoor Unit)
	ASSY TUBE MUFFLER	DB96-18020A	1	
G200	ASSY-INSTALLATION MANUAL (Outdoor Unit)	DB68-03207A	1	
	ASSY-USER MANUAL	DB68-03238A	1	
	ASSY-INSTALLATION MANUAL	DB68-03239A	1	
Management of the state of the	Pattern sheet	DB98-32365A	1	
	service valve	DB96-13833A/B	1	Essential Offer (Hydro unit)
	wall mounting bracket	DB61-04402A	1	
	remote controller wire	DB93-08797B	1	
	ASSY THEMISTOR-WATER TANK	DB95-04326A	1	
	Cover controller	DB63-02634A	1	

3. Disassembly and Reassembly

■ Hand Tool sets

Item	Remark
+Screw Driver	
Adjustable wrench	
–Screw Driver	The state of the s
Nipper	
Electric Motion Driver	
L-Wrench	
Torque Lench	
Latchet Lench	

3-1 Hydro Unit

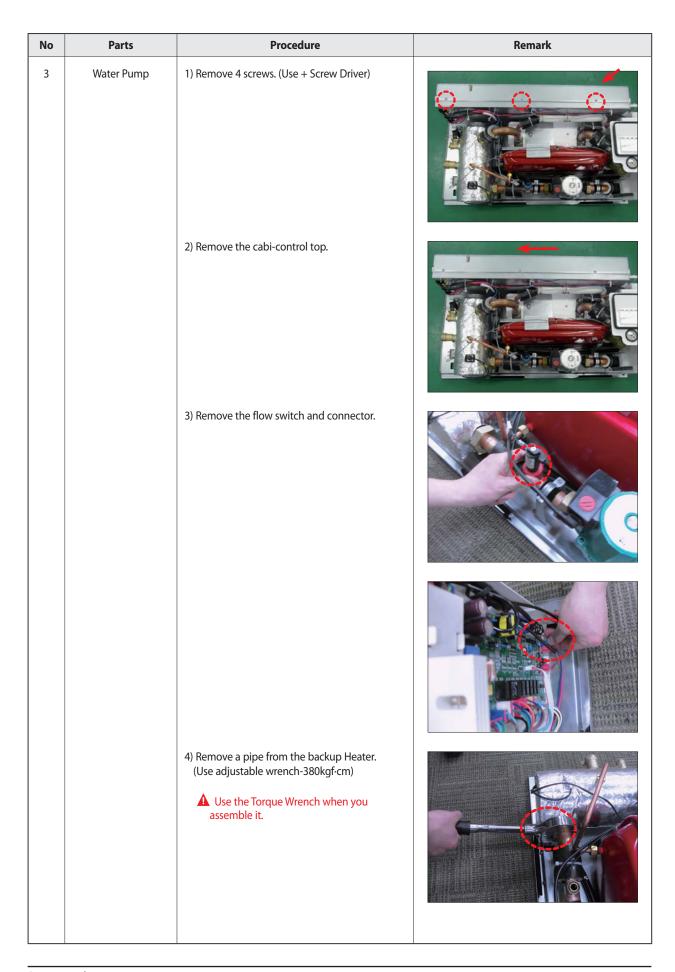
■ AEN160YD*/AEN080YD*

Be sure that the power switch is in the "OFF" and the power source cord shall be unplugged prior to disassembly and reassembly works.

No	Parts	Procedure	Remark
1	Panel	Remove 4 cover screws from the Hydro Unit. (Use + Screw Driver)	
2	Controller & Manometer	1) Remove 3 screws from it. (Use + Screw Driver)	
		2) Remove pressure sensor by adjustable wrench. (Use adjustable wrench-230kgf-cm)	
		3) Pull the manometer out.	
		4) Pull the LED display up and out.	SAMSUNG

No	Parts	Procedure	Remark
		5) Remove the connector from the PCB board.	AND RESPONSE AND
		6) Remove the upper case of the controller.	
		7) Remove 5 screws. Set a side the drain pan and hydro unit.	

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No	Parts	Procedure	Remark
		5) After removing insulation material, remove the Thermostat.	
		6) Remove 2 screws. (Use + Screw Driver)	
		7) Remove 2 screws. (Use + Screw Driver)	
		8) Pull the water pump & pipes up, out.	

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No	Parts	Procedure	Remark
4	Expansion Vessle	1) Remove the tube of the expansion vessel and the backup heater by adjustable wrench. (Use adjustable wrench-150kgf·cm) Use the Torque Wrench when you assemble it.	
		Remove 2 screws. (Use + Screw Driver) 3) After removing the nut. Pull the bracket out.	
		4) Pull the expansion vessel up, out.	
5	Plate Heat Exchanger	1) Remove 4 insulations.	

No	Parts	Procedure	Remark
		2) Remove 4 Thermostats.	
		3) Remove the Thermostat conector on the PCB of the Control box.	
		4) Remove the pipe from the Backup Heater. (Use adjustable wrench-380kgf-cm) Use the Torque Wrench when you assemble it.	
		5) Remove 6 screws. (Use + Screw Driver)	
		6) Pull the PHE out of the unit.	

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No	Parts	Procedure	Remark
6	Control Box	1) Remove 4 Thermostats. Set a side the terminal block and PBA case. (Use + Screw Driver)	
		2) Remove Conectors.	
		3) Remove 3 screws. (Use + Screw Driver)	
			30 State 185 - 185 State 1
		4) Pull the cabi-control bottom out by pushing as indicated diretion.	

No	Parts	Procedure	Remark
7	Backup Heater	1) Remove the Drain Hose.	
		2) After removing 4 screws, set a side the backup heater and the unit. (Use + Screw Driver)	

3-2 Outdoor Unit

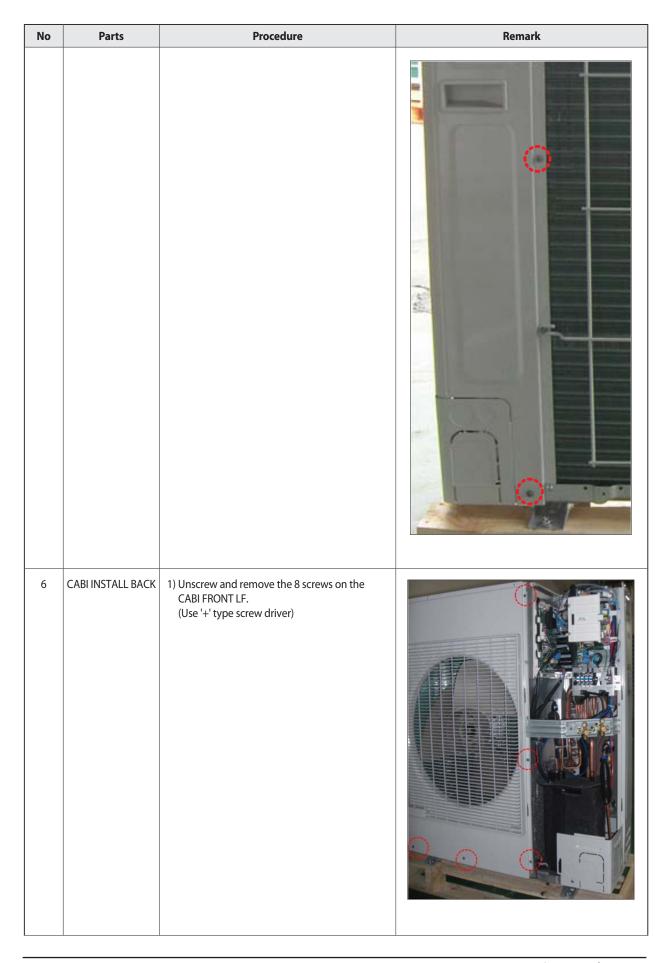
■ AEX100ED*/AEX125ED*/AEX140ED*/AEX160ED*

No	Parts	Procedure	Remark
1	CABI FRONT RH	You must turn off the power before disassembling. 1) Unscrew and remove the three screws on the CABI FRONT RH. (Use '+' type screw driver)	SAMSUNG
			SIMERTER
2	CABITOP	1) Unscrew and remove the nine screws on each side of the CABI TOP. (Use '+' type screw driver)	SAMSUNG
3	CABI INSTALL FRONT	1) Unscrew and remove the screw on the CABI INSTALL FRONT. (Use '+' type screw driver)	

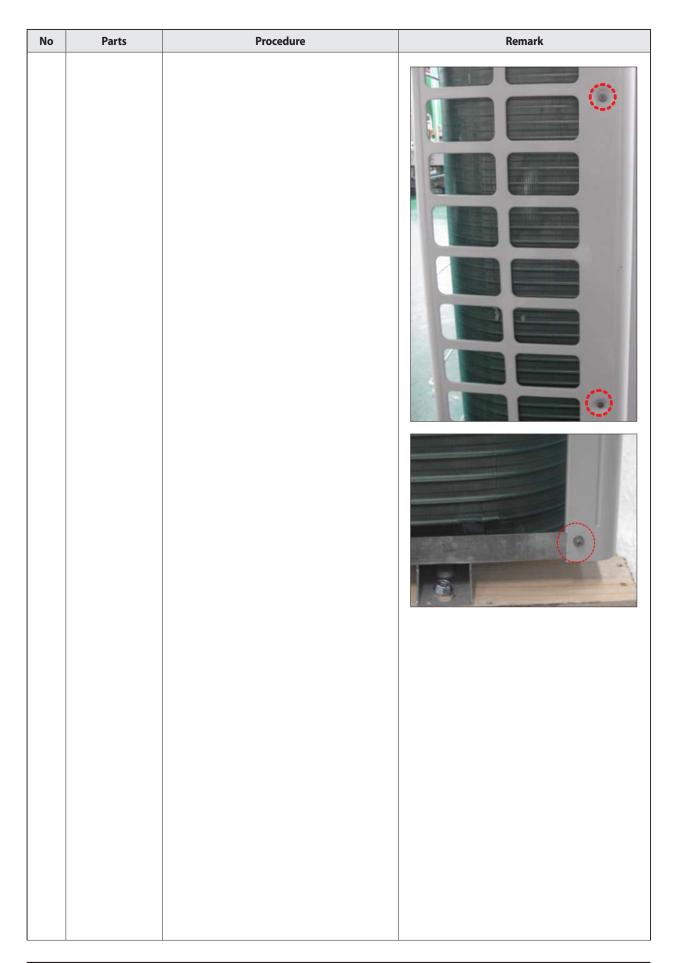
No	Parts	Procedure	Remark
4	GUARD COND	1) Pull the sensor from Guard Cond.	
		2) Unscrew and remove the four screws on the GUARD COND. (Use '+' type screw driver)	

RC160MHXGA_SM_E_34513A(1)_1-3.indd 22 2012-08-07 4:26:52





RC160MHXGA_SM_E_34513A(1)_1~3.indd 24 2012-08-07 4:26:53



7 FAN 1) Turn the two nuts as shown in the
picture and remove them. (Use adjustable wrench)

No	Parts	Procedure	Remark
8	MOTOR	1) Remove the fan. 2) Unscrew and remove the eight motor screws. (Use '+' type screw driver)	
		3) Disconnect the motor wire from the Ass'y Control Out.	

9 BRACKET MOTOR 1) Unscrew and remove the two screws on the BRACKET MOTOR. (Use '+'type screw driver)

No	Parts	Procedure	Remark
10	CONTROL OUT	Disconnect the six connectors form the ASSY CONROL OUT	
		2) Unscrew and remove the three screws	
		on the CONTROL OUT. (Use '+' type screw driver) 3) Separate the ASSY CONTROL OUT.	

No	Parts	Procedure	Remark
11	ASSY 4WAY VALVE	Purge the coolant first. Unscrew and remove the four screws on the SERVICE VALVE. (Use '+' type screw driver)	
		3) Separate the pipe from the Entrance/Exit using a welder.	
		When removing the compressor, heat exchanger and pipe, purge the completely and remove the pipe with a welding flame.	ATTENNATION OF THE PROPERTY OF

RC160MHXGA_SM_E_34513A(1)_1-3.indd 30 2012-08-07 4:26:56

No	Parts	Procedure	Remark
12	COMPRESSOR	Unscrew and remove the nut on the COVER TERMINAL. (Use adjustable wrench)	
		2) Separate the compressor wire.	
		3) Separate the COMPRESSOR FELT SOUND.	
		4) As shown in the picture, unscrew and bottom. (Use Adjustable Wrench)	

No	Parts	Procedure	Remark
No 13	Parts ASSY COND OUT	1) Unscrew remove the two screws on each side of the ASSY COND OUT. (Use '+' type screw driver)	Remark

■ AEX060EDEHA

No	Parts	Procedure	Remark
1	Common Work	Loosen 1 fixing screw of the Cover-Control and detach the Cover Control.	
		2) Loosen fixing screws and detach the Cabinet-Upper.	
		3) Loosen 1 screw fixed to assemble Control Box with Cabinet-Side RH.	
		4) Loosen 6 fixing screws and detach the Cabinet-Side RH.	

No	Parts	Procedure	Remark
		5) Loosen 2 screws fixed on the Guide Condenser.	
		6) Loosen fixing screws of the Cabinet Front.	
			SINVERTER

RC160MHXGA_SM_E_34513A(1)_1~3.indd 34 2012-08-07 4:26:57

No	Parts	Procedure	Remark
2	Fan & Motor	Detach the Nut Flange like the picture on the right side. (Turn clockwise because the screw is left-handed.)	
		Detach the Fan Propeller. Loosen 4 fixing screws to detach the Motor.	
		4) Disconnect the wire between Ass'y Control Out and Motor.	
		5) Loosen 2 fixing screws and detach the Bracket Motor.	
3	Ass'y Control Out	1) Detach several connectors from the Ass'y Control Out. 2) Detach several connectors from the PCB of Ass'y Control Out. 3) Pull up the Ass'y Control Out.	

No	Parts	Procedure	Remark
4	Heat Exchanger	 Release the refrigerant at first. Loosen fixing screw. Disassemble the pipes in both inlet and outlet with welding torch. Detach the Heat Exchanger. *Before you disassemble the pipes and Condenser, be sure that there should be no refrigerant remained in the unit. 	
		1) Loosen fixing screw(CCW) and detach the Heat Exchanger	
5	Compressor	Loosen the fixing nut and detach the Compressor Lead Wire. Disassemble the Felt Comp Sound.	
		3) Loosen the 3 bolts at the bottom of Compressor like the picture on the right side.	

36 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_1~3.indd 36 2012-08-07 4:26:57

4. Troubleshooting

4-1 Wired remote controller

- If an error occurs, (\blacksquare) icon will be displayed on the wired remote controller.
- Press the Test button to see the error code.

Eurou manda	Contoute	Manage	Product operation in error condition	Funcustance	
Error mode	Contents	Measure	Outdoor unit/ Compressor/Indoor unit	Error type	
888	Indoor unit communication error	Check the communication cable of indoor unit. Check the DC output voltage at the communication terminal	Operation Off	Communication error	
888	Indoor unit/outdoor unit communication time-out error: errors in more than 6 packets	Check the outdoor communication cable connection. Check DC output voltage and the communication terminal	Operation Off	Communication error	
888	Indoor temperature sensor (open/short error)	Check indoor unit room temperature sensor. Check indoor unit PCB connector CN41 (White)	Operation Off	Indoor sensor error	
888	Indoor unit Eva In sensor (Open/Short)	Check indoor unit pipe sensor. Check indoor PCB connector CN41(White)	Operation Off	Indoor sensor error	
888	Indoor unit Eva In sensor disconnection	Check the disconnection of indoor unit pipe sensor	Operation Off	Indoor sensor error	
888	Indoor floating switch secondary detection	Check indoor unit float sensor. Check indoor PCB connector CN5 (black)	Operation Off	Self diagnostic error	
288	Indoor/outdoor communication error (1 min)	Check the communication connection between indoor and outdoor units. Check the power line and communication cable connection status	Operation Off	Communication error	
288	Communication error between indoor/outdoor INV↔MAIN MICOM (1 min)	Check MAIN MICOM Check INVERTER MICOM	-	Communication error	
888	Outdoor temperature sensor error	Check sensor connection status Check sensor location Check sensor resistance	Operation Off	Outdoor sensor error	
888	COND temperature sensor error	Check sensor connection status Check sensor location Check sensor resistance	Operation Off	Outdoor sensor error	
258	[Inverter] Emission temperature sensor error	Check sensor connection status Check sensor location Check sensor resistance	Operation Off	Outdoor sensor error	
888	Emission temperature excessively high	No error (DISCHARGE temperature control)	-	Outdoor unit protection control error	
888	Heating operation blocked	Check the operation setting state Check temperature sensor	Operation Off	Self diagnostic error	
888	Cooling operation blocked	Check the operation setting state Check temperature sensor	Operation Off	Self diagnostic error	
858	Outdoor fan 1 error	Check input power connection status Check the connection status between the motor and outdoor unit PCB Check indoor/outdoor fuse	Operation Off	Self diagnostic error	
888	[Inverter] Compressor startup error	Check the compressor connection status Check the resistance between difference phases of the compressor	Operation Off	Outdoor unit protection control error	
888	[Inverter] Total current error/ PFC over current error	Check the input power Check the coolant charging status Check the normal operation of outdoor fan	Operation Off	Outdoor unit protection control error	

Samsung Electronics 37

4:29:24

Wired remote controller (cont.)

			Product operation in error condition	
Error mode	Contents	Measure	Outdoor unit/ Compressor/Indoor unit	Error type
868	[Inverter] IPM over current error	Check coolant charging Check the compressor connection status and normal operation Check the obstacles around the indoor and outdoor units Check whether the outdoor unit service valve is open Check whether the indoor/outdoor installation pipe/ wiring are correct	Operation Off	Outdoor unit protection control error
885	Compressor V limit error	Check the compressor connection status Check the resistance between difference phases of the compressor	Operation Off	Outdoor unit protection control error
888	DC LINK over/low voltage error	Check input power Check AC power connection	Restart in 3 minutes	Outdoor unit protection control error
888	[Inverter] Compressor rotation error	Check the compressor connection status Check the resistance between difference phases of the compressor	Operation Off	Outdoor unit protection control error
888	[Inverter] Current sensor error	Check EEPROM DATA Check the normal operation of PCB	Operation Off	Outdoor unit protection control error
888	[Inverter] DC LINK voltage sensor error	Check the input power connection Check the status of RY21 and R200 in the INVERTER PCB	Operation Off	Outdoor unit protection control error
888	[Inverter] OTP error	Check EEPROM DATA Check the normal operation of PCB	Operation Off	Outdoor unit protection control error
888	AC ZERO CROSSING SIGNAL OUT error	Check the input power status	Operation Off	Outdoor unit protection control error
888	Compressor LOCK error	Check the compressor connection status Check the resistance between difference phases of the compressor	Operation Off	Outdoor unit protection control error
885	Outdoor fan 2 error	Check the input power connection status Check the connection status of the motor and the outdoor unit PCB Check the indoor/outdoor unit fuse	Operation Off	Self diagnostic error
558	Gas leak error	Check the coolant charging status Check the indoor EVA sensor Check if the outdoor unit service value is open Check that the indoor/outdoor installation pipe/wiring are correct	Operation Off	Self diagnostic error
888	Capacities not matched	Check the option code of the indoor unit	Operation Off	Outdoor unit protection control error
<i>688</i>	Communication error between the indoor unit and wired remote controller	Check the connection wire between the indoor unit and the wired remote controller	Normal operation	Wired remote controller error
<i>882</i>	Communication error between the Master and Slave wired remote controllers	Check the option switch for defining the Master and Slave (only one Master and one Slave can exist)	Normal operation	Wired remote controller error

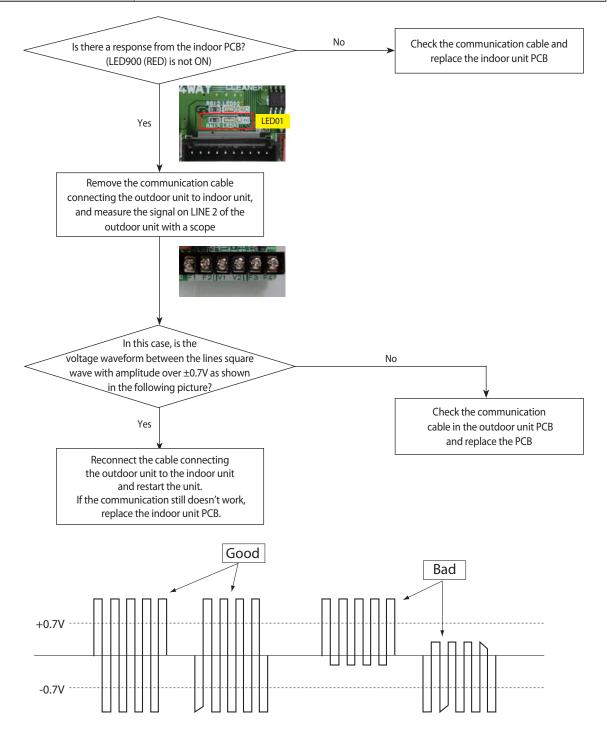
Wired remote controller (cont.)

			Product operation in error condition	
Error mode	Contents	Measure	Outdoor unit/ Compressor/Indoor unit	Error type
888	COM1/COM2 cross installation error	Check that wired remote controller is connected to the COM2 terminal of the indoor unit	Normal operation	Wired remote controller error
888	Communication error between the Master and Salve wired remote controllers	Check the option switch for defining the Master and salve(Only one Master can exist)	Normal operation	Wired remote controller error
888	Wired remote controller COM2 option setting error	Check that Com1, Com2 setting DIP switch is set to Com2	Normal operation	Wired remote controller error

4-2 Troubleshooting by symptoms

4-2-1 Communication error after finishing Tracking

Indoor unit display	E604
Symptom	Communication error between the indoor and outdoor unit for two minutes
Failure	Communication error between the indoor unit and outdoor unit

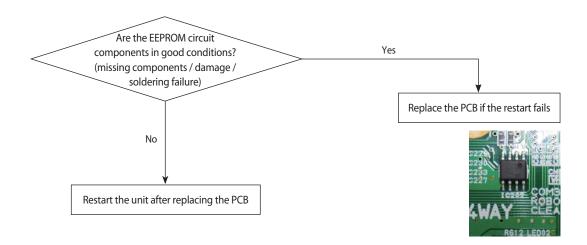


40 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 40 2012-08-07 4:29:25

4-2-2 EEPROM circuit failure

Indoor unit display	E 162
Symptom	EEPROM circuit failure
Failure	EEPROM component failure, EEPROM circuit parts missing/damaged/soldering failure

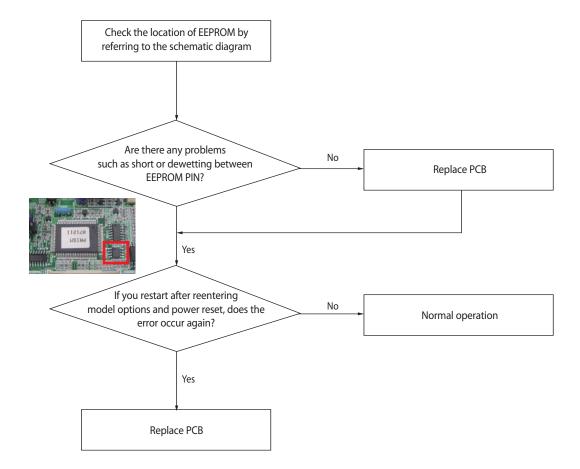


4-3 Hydro Unit

4-3-1 EEPROM error

Outdoor unit display	E 162	
Indoor unit display	×(Operation)	
Criteria	Communication failure between EEPROM and MICOM	
Cause of problem	• PCB replacement due to defective EEPROM	

1. How to check



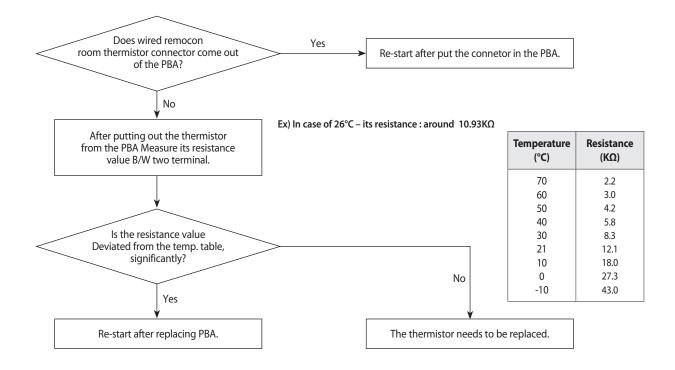
42 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 42 2012-08-07 4:29:26

4-3-2 $\mathcal{E}\mathcal{B}\mathcal{G}\mathcal{G}$: Error due to abnormal data of Wired remote controller thermistor value

Outdoor unit display	$EBBB \leftrightarrow R \times \times$	
Wired remocon display	E653	
Criteria	Refer to how to determine below	
Cause of problem	Wired remocon room thermistor has a defective OPEN/SHORT	

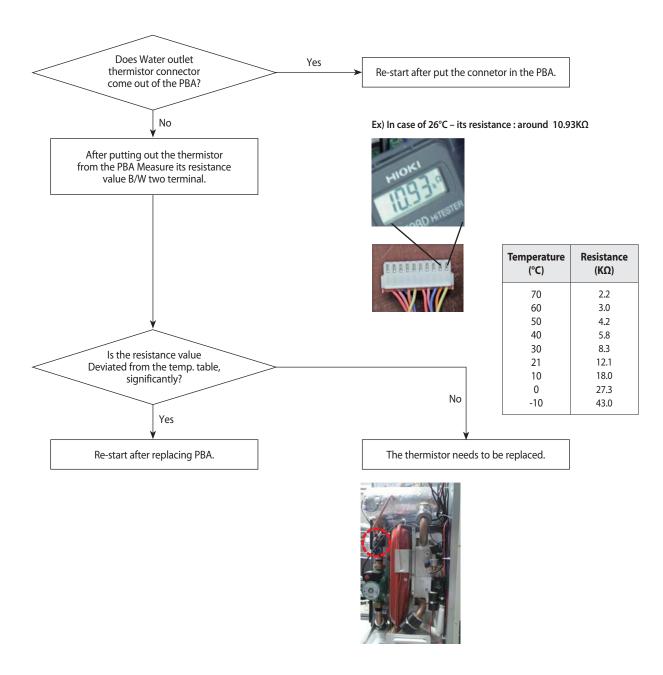
1. How to check



4-3-3 $\mathcal{E} \mathcal{G} \mathcal{G} \mathcal{G}$: Error due to abnormal data of Water outlet thermistor value

Outdoor unit display	$F = 2 \times 3 \times X \times X$
Wired remocon display	E903
Criteria	Refer to how to determine below
Cause of problem	Water outlet thermistor has a defective OPEN/SHORT

1. How to check



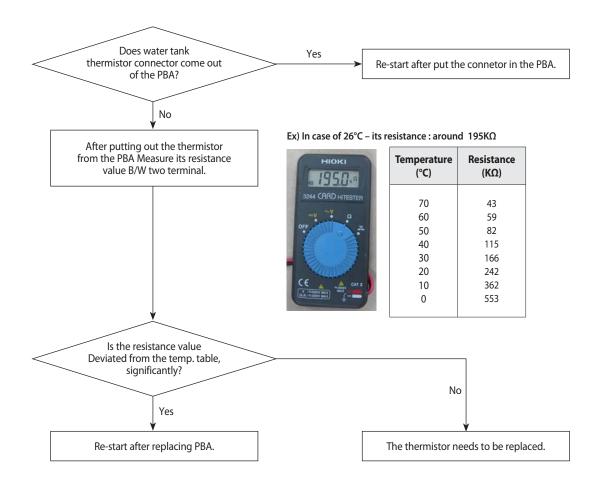
44 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 44 2012-08-07 4:29:27

4-3-4 ₣₲₢₭: Error due to abnormal data of DHW tank thermistor value

Outdoor unit display	F G	
Wired remocon display	E904	
Criteria	Refer to how to determine below	
Cause of problem	• DHW tank thermistor has a defective OPEN/SHORT	

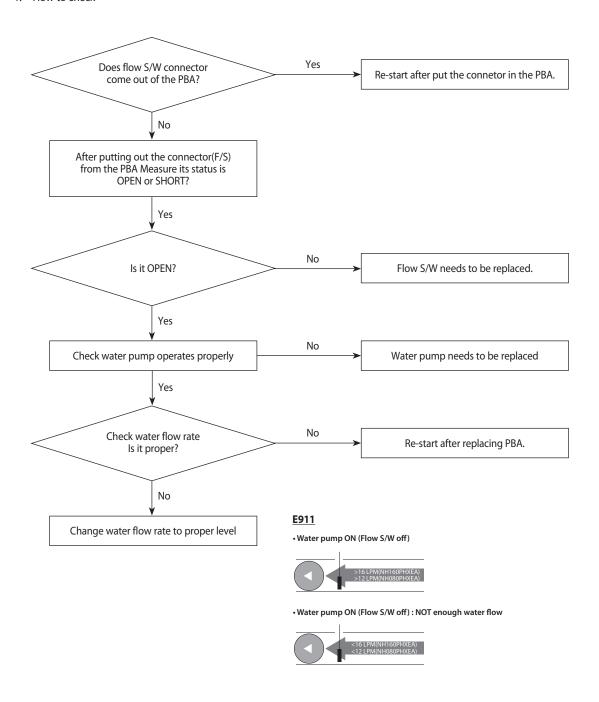
1. How to check



4-3-5 Water pump & flow switch OFF

Wired remocon display	<i>E9 </i>
Criteria	• Refer to how to determine below
• Flow switch signal is off during 10seconds when the water pump signal is ON	

1. How to check



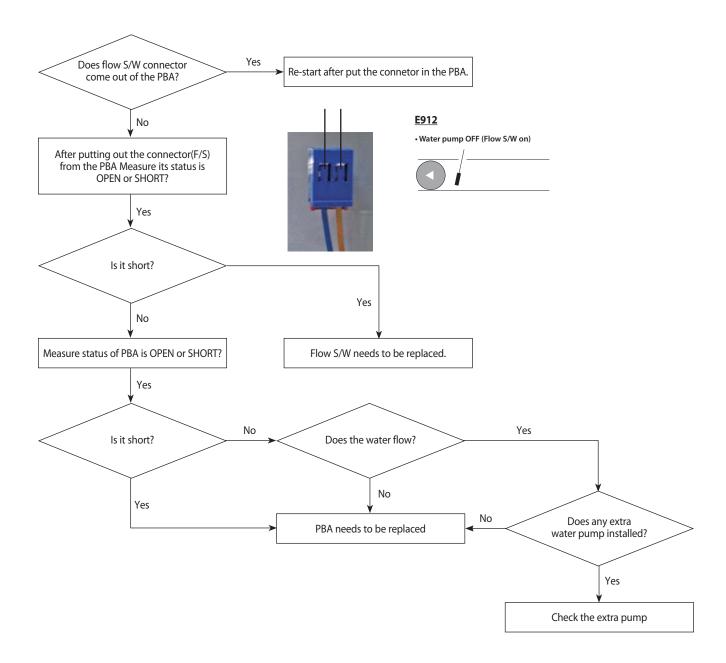
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RC160MHXGA_SM_E_34513A(1)_4.indd 46 2012-08-07 4:29:28

4-3-6 Water pump & flow switch ON

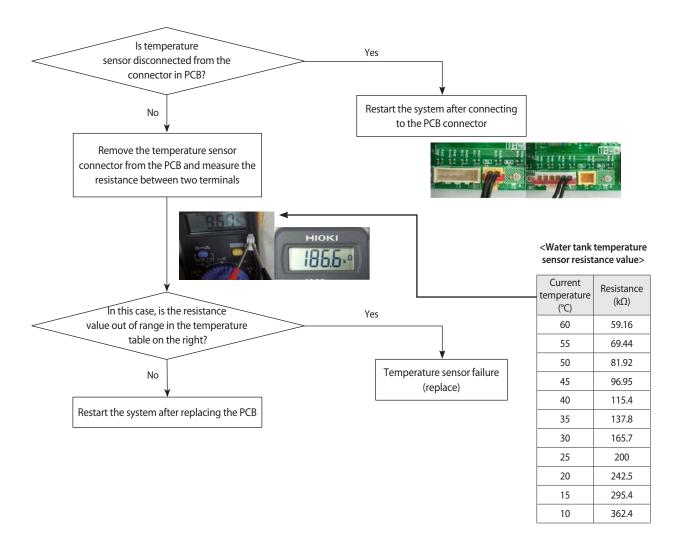
Wired remocon display	E9 12
Criteria	• Refer to how to determine below
Cause of problem	• Flow switch signal is on during 10seconds when the water pump signal is off)

1. How to check



4-3-7 Hydro unit temperature sensor(open/short)

Error Mode E901, E902, E903, E904, E906	
Symptom In case of open or short circuit of indoor temperature sensor	
Failure Short or leakage of the corresponding sensor	

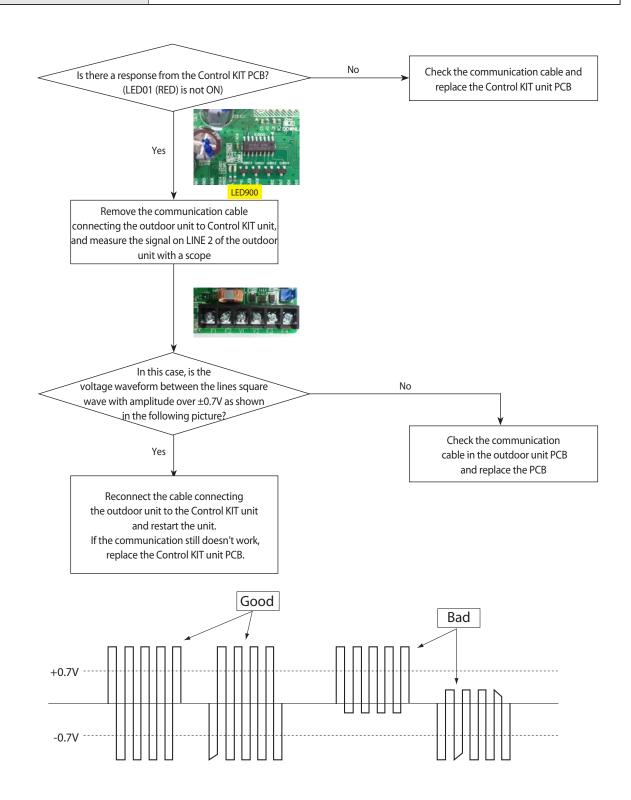


48 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 48 2012-08-07 4:29:28

4-3-8 Communication error after finishing Tracking(Hydro unit)

Error Mode	E201, E202
Symptom Communication error between the Control KIT and outdoor unit for two minutes	
Failure Communication error between the Control KIT unit and outdoor unit	



4-4 Items to check before diagnostics

4-4-1 Test run mode and view mode

■ Display Option Key

KEY	KEY operation	7-segment display
1/1	Press once : Heating test run	" <i>F</i> " " <i>I</i> " "BLANK" "BLANK"
K1 Press twice: Defrost test run "E"" "BLANK""		" <i>F"</i> "∄" "BLANK" "BLANK"
	Press 3times : Finishing test mode	-
1/2	Press once : Cooling test run	" <i>Ē</i> " " <i>Ē</i> " "BLANK" "BLANK"
K2 Press twice : Finishing test mode		-
К3	Reset	
K4	View mode	Refer to View mode display



KEY (K1~K4)

■ VIEW mode display

Number	Display contents	Display				
of press	Display contents	Segment 1	Segment 2	Segment 3	Segment 4	Units
0	Communication State	Two digits of Tx	One digit of Tx	Two digits of Rx	One digit of Rx	
1	Order frequency	1	Three digits	Two digits	One digit	Hz
2	Current frequency	2	Three digits	Two digits	One digit	Hz
3	Type of Outdoor unit(Mone/Split)					
4	Out sensor	4	Two digits	One digit	First decimal	°C
5	Discharge sensor	5	Two digits	One digit	First decimal	°C
6	OLP sensor	6	Two digits	One digit	First decimal	°C
7	Cond sensor	7	Two digits	One digit	First decimal	°C
8	Current	8	Two digits	One digit	First decimal	°C
9	Fan RPM	9	Three digits	Two digits	One digit	rpm
10	Target discharge temperature	А	Three digits	Two digits	One digit	°C
11	EEV	В	Three digits	Two digits	One digit	step
12	Total indoor heat exchanger capacity	С	Two digits	One digit	First decimal	kW
13	Protection control	D	0 : air conditioning 1 : heating	Protection control 0: no protection control 1: freezing 2: non-stop defrosting 3: over-load 4: discharge	Frequency state 0 : Normal 1 : Hold 2 : Down 3 : Up_limit 4 : Sown_limit	-
14	Temperature of Heatsink at PBA	E	Two digits	One digits	First decimal	°C
15	The Quantity of connected Indoor Unit	F	Three digits	Two digits	One digit	set
long-1	Main Micom version	Year(Hex)	Month(Hex)	Day(two digit)	Day(One digit)	-
long-1 and 1	Inverter Micom version	Year(Hex)	Month(Hex)	Day(two digit)	Day(One digit)	-
long-1 and 2	EEPROM version	Year(Hex)	Month(Hex)	Day(two digit)	Day(One digit)	-

50 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 50 2012-08-07 4:29:29

4-4-2 Troubleshooting for outdoor unit

If an error occurs during the operation, it is displayed on the outdoor unit PCB LED, both MAIN PCB and INVERTER PCB.

LED Display		Displayed	Displayed Massium Borns		5		
No.	Red	Green	Yellow	PCB Assy	Meaning	Remarks	Error Code
-	•	•	0	MAIN/INVERTER	Normal operation (MAIN : Indoor ↔ Outdoor : Green ON) (INVERTER : MAIN PCB ↔ INVERTER PCB : Green ON)		-
1	•	•	0	MAIN	Control Kit quantity is mismatched.	Check Control Kit quantity setting in outdoor	E201
2	•	•	0	MAIN/INVERTER	Abnormal state, no communication between	Check electrical	E202
	ı	0	0		Indoor and Outdoor Main PCB	connection and setting	
4	•	•	•	MAIN/INVERTER	1min. Time out of communcation error(Main↔Inverter)	Check electrical connection and setting	E203
5	•	•	0	MAIN	Outdoor temp sensor error	Check Outdoor sensor Open/Short	E221
6	•	•	0	MAIN	Cond. temp sensor error	Check Cond. sensor Open/Short	E231
7	•	•	0	MAIN	Discharge temp sensor error	Check Discharge sensor Open/Short	E251
8	•	•	0	MAIN	OLP Sensor Error	Check OLP sensor Open/Short	E320
9	•	•	0	MAIN	Detection of Outdoor Freezing when Comp. Stop	Check Outdoor Cond.	E403
10	•	•	0	MAIN	Protection of Outdoor Overload when Comp. Stop	Check Comp. when it start	E404
11	•	•	0	MAIN	Discharge temperature of a compressor in an outdoor unit is overheated.		E416
12	•	•	0	MAIN	Outdoor EEV Open error	Check EEV	E419
13	•	•	0	MAIN	Miss wiring error at 3Phase power source line (Only 3Phase Model)	Check Power Line-R,S,T,N	E425
14	•	•	0	MAIN	Gas leakage error (Stop state)	Check Gas leak	E439
15	•	•	0	MAIN	Heating operation is not available since the outdoor air temperature is over 35°C.	Heating	E440
					16	Cooling	E441
16	•	•	0	MAIN	Gas leakage error (Before operating)	Check Gas leak	E443
17	0	0	•	MAIN/INVERTER	Outdoor unit BLDC Fan 1 or Fan 2 error	FAN1 error	E458 E475
18	0	•	0	MAIN/INVERTER	Comp. Starting error		E461
19	•	•	0	MAIN	Primary Current Trip error		E462
20	•	•	0	MAIN	Over current trip / PFC over current error	Check OLP sensor	E463
21	•	0	0	MAIN/INVERTER	IPM(IGBT Module) Over Current(O.C)		E464
22	0	•	•	MAIN/INVERTER	Comp. Over load error		E465
23	•	•	0	MAIN/INVERTER	DC-Link voltage under/over error	Check AC Power or DC_Link voltage	E466

Samsung Electronics 51

RC160MHXGA_SM_E_34513A(1)_4.indd 51 2012-08-07 4:29:29

Troubleshooting for outdoor unit(con.)

If an error occurs during the operation, it is displayed on the outdoor unit PCB LED, both MAIN PCB and INVERTER PCB.

Na	No.		LED Display Displayed	Marian	Remarks	Error Code	
INO.	Red	Green	Yellow	PCB Assy	Meaning	nemarks Enorce	
24	•	0	•	MAIN/INVERTER	Comp. wire missing error	Check Comp. wire	E467
25	•	•	•	MAIN/INVERTER	Current sensor error	Check Outdoor Inverter PBA	E468
26	•	•	0	MAIN	DC-Ling voltage Sensor error	Check Input voltage	E469
27	•	•	0	MAIN	EEPROM read/write error	Check EEPROM	E470
28	•	•	0	MAIN	Outdoor EEPROM error	Check Outdoor EEPROM date	E471
29	•	•	0	MAIN/INVERTER	IPM(IGBT Module) or PFCM Temperature sensor Error	Check Outdoor Inverter PBA	E474
30	•	•	•	MAIN/INVERTER	PFC Overload Error	Check Outdoor Inverter PBA	E484
31	•	•	0	MAIN	Input current sensor error		E485
32	•	•	0	MAIN/INVERTER	IPM is over heated.	Check Outdoor Inverter PBA	E500
33	•	•	0	MAIN	GAS Leak error	Check indoor and outdoor unit model	E554
34	•	•	0	MAIN	Water inlet temperature sensor error	Check Water inlet sensor	E901
35	•	•	0	MAIN	Water outlet temperature sensor error	Check Water outlet sensor	E903
36	•	•	0	MAIN	Refriqerant gas inlet temperature sensor error	Check Gas inlet sensor	E906

O Off ● Blink ● On

52 Samsung Electronics

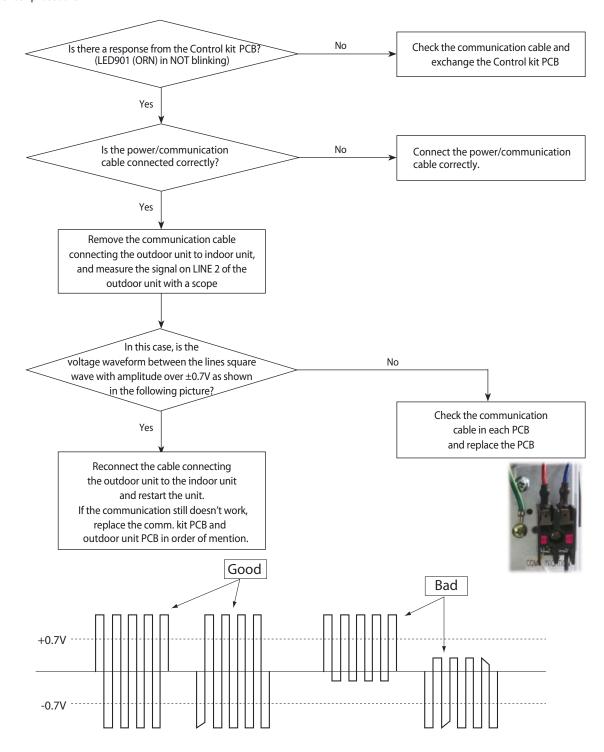
RC160MHXGA_SM_E_34513A(1)_4.indd 52 2012-08-07 4:29:29

4-5 Troubleshooting by symptoms

4-5-1 Communication error after finishing tracking (E202)

- 1. Check items
 - 1) Is the communication cable short/open?
 - 2) Is there a response from the Control kit PCB?

2. Check procedure



cf.) If there is no oscillo scope, it can be replaced multimeter instead of osillo scope. If measured voltage is floating value from 0.1V to 4.5V, then it means that the PCB is normal.

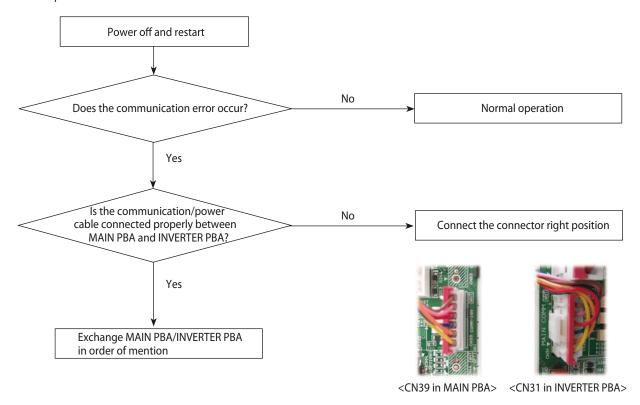
Samsung Electronics 53

RC160MHXGA_SM_E_34513A(1)_4.indd 53 2012-08-07 4:29:30

4-5-2 Time out (1min.) of communication error between MAIN PBA and INV. PBA (E203)

- 1. Check items
 - 1) Is the communication cable connected properly between MAIN PBA and INVERTER PBA?
 - 2) Is the power cable connected correctly?

2. Check procedure



54 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 54 2012-08-07 4:29:30

4-5-3 Temperature sensor error (E221, E231, E251, E320)

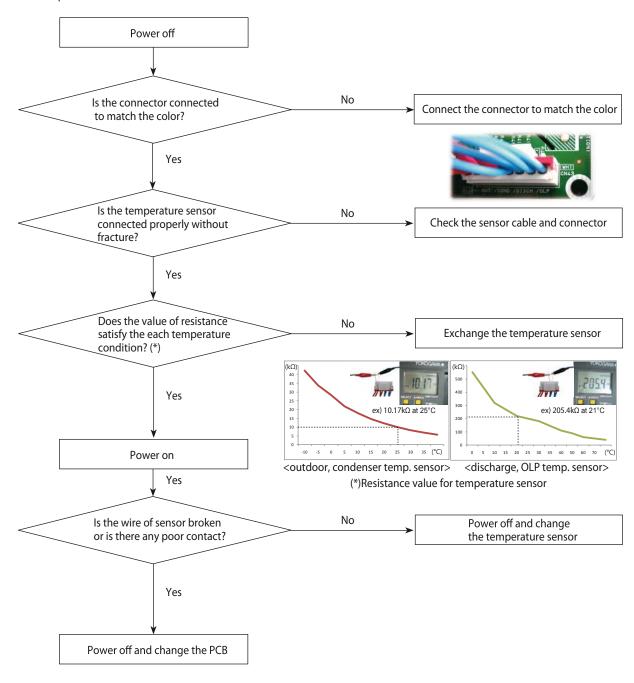
<Error code for each temperature sensor>

	Pin no. Temp. sensor	-	Error
61.42		code	
CN43	1,2	Outdoor	E221
MAIN PBA	3,4	Condenser	E231
	5,6	Discharge	E251
	7,8	OLP	E320

1. Check items

- 1) Is the sensor connected correctly (CN43 in MAIN PBA)?
- 2) Is the postion of sensor correct?
- 3) Does the value of resistance satisfy the each temperature condition?

2. Check procedure



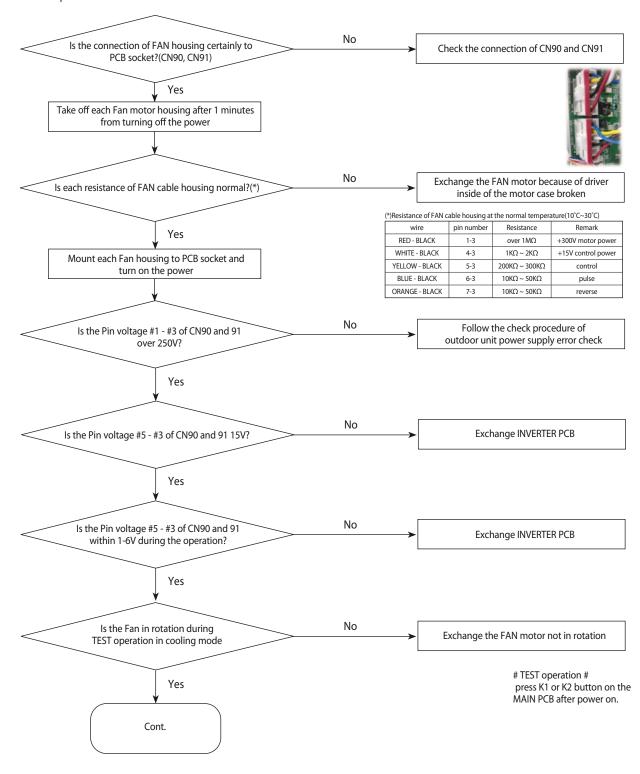
4-5-4 Fan error (E458, E475)

FAN 1 error(E458), FAN 2 error(E475)

1. Check items

- 1) Are the input power voltage and power connection correct?
- 2) Is the motor wire connected to the outdoor PCB correctly?
- 3) Is there no obstacle at the surrounding of motor and propeller?
- 4) Does the driver in the motor case broken?

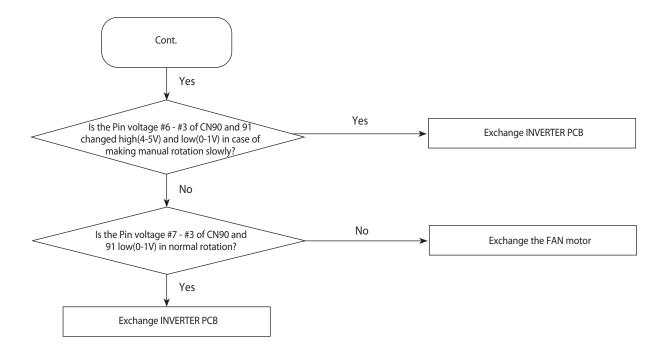
2. Check procedure



56 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 56 2012-08-07 4:29:32

Fan error (E458, E475) (cont.)



Samsung Electronics 57

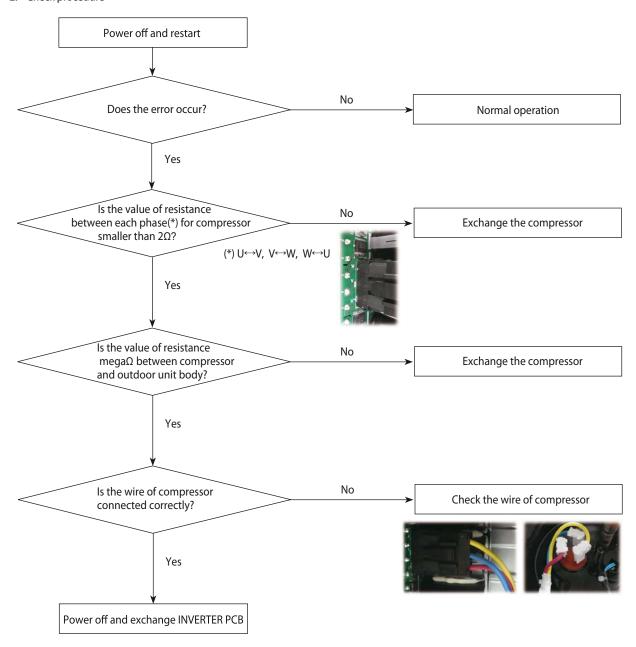
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4-5-5 Compressor error (E461, E467)

Compressor starting error(E461), Compressor wire missing error(E467)

- 1. Check items
 - 1) Is the power connected properly?
 - 2) Is the connector of compressor connected correctly?
 - 3) Is the resistance normal between each phase for compressor?

2. Check procedure



58 Samsung Electronics

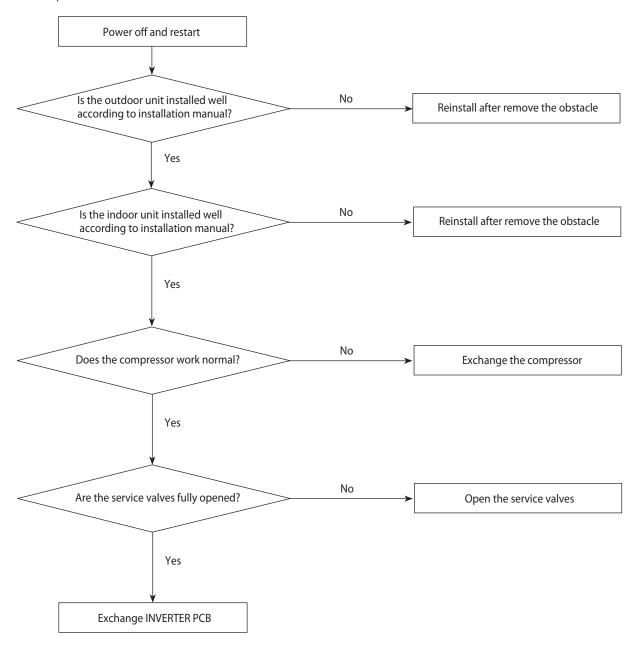
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4-5-6 Current trip error (E462, E463)

Primary current trip error(E462), Over current trip / PFC over current error(E463)

- 1. Check items
 - 1) Is the voltage of power suitable?
 - 2) Is refrigerant charged?
 - 3) Does the fan of outdoor unit work normally?
 - 4) Is there any obstacle around indoor and outdoor unit?

2. Check procedure

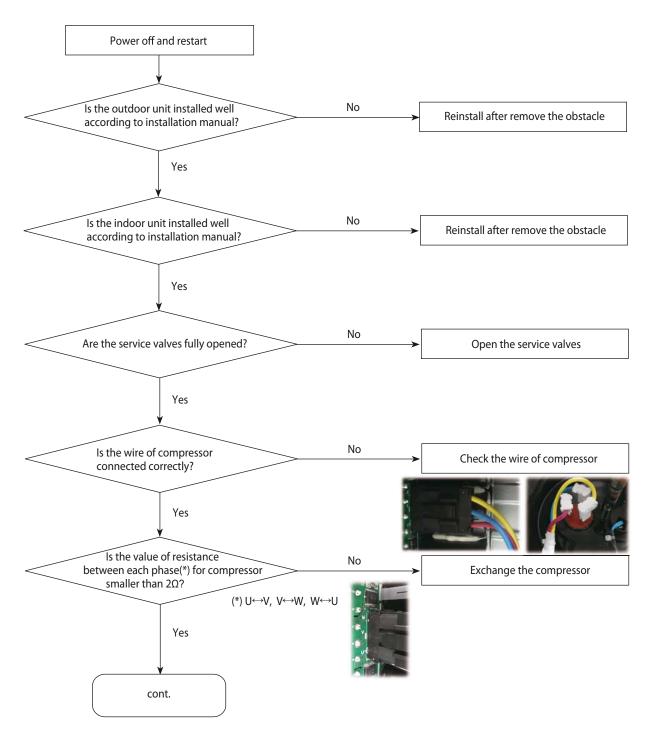


4-5-7 IPM(IGBT module) over current error (E464)

1. Check items

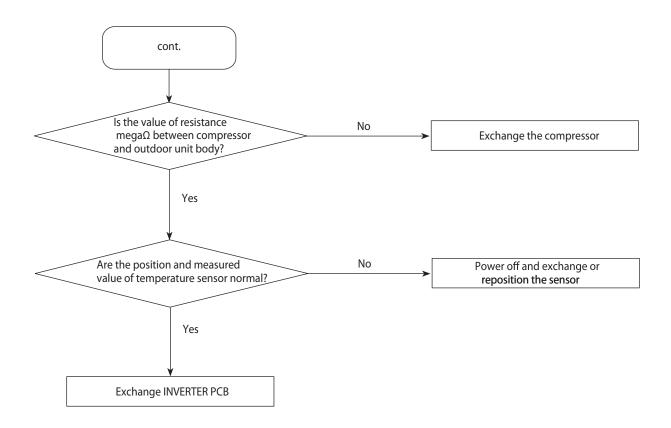
- 1) Is refrigerant charged?
- 2) Does the compressor work normally?
- 3) Is the connection of compressor correctly?
- 4) Is there any obstacle around indoor and outdoor unit?

2. Check procedure



60 Samsung Electronics

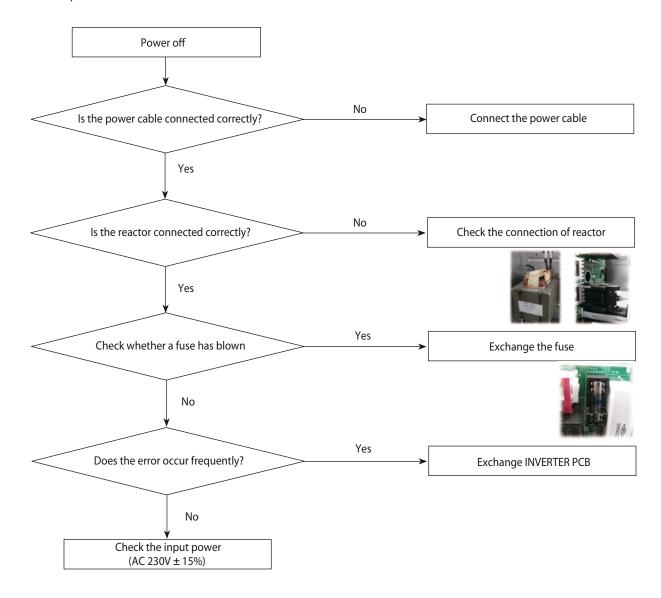
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4-5-8 DC-link voltage under/over error (E466)

- 1. Check items
 - 1) Is the input power normal?
 - 2) Is the AC power connected correctly?

2. Check procedure



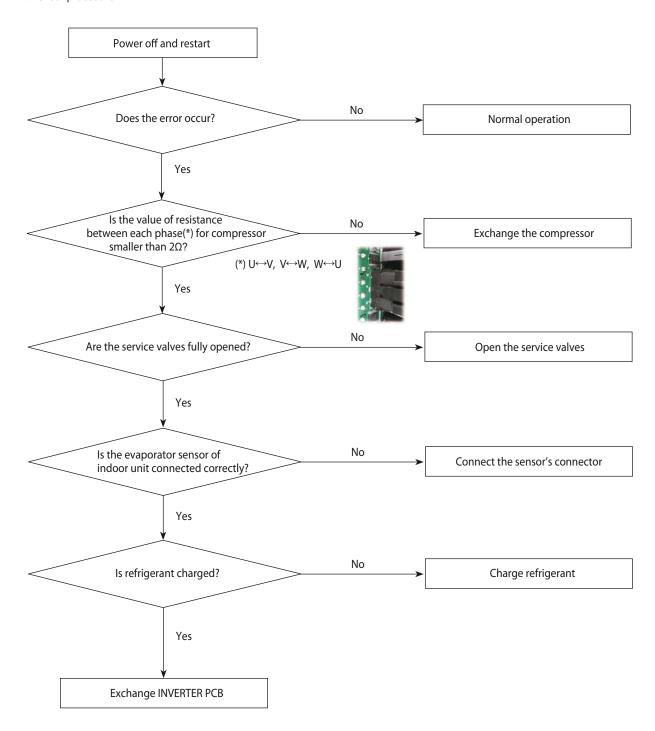
62 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 62 2012-08-07 4:29:33

4-5-9 GAS leak error(E554)

- 1. Check items
 - 1) Is refrigerant charged?
 - 2) Is the evaporator sensor of indoor unit connected correctly?

2. Check procedure



4-5-10 The other errors

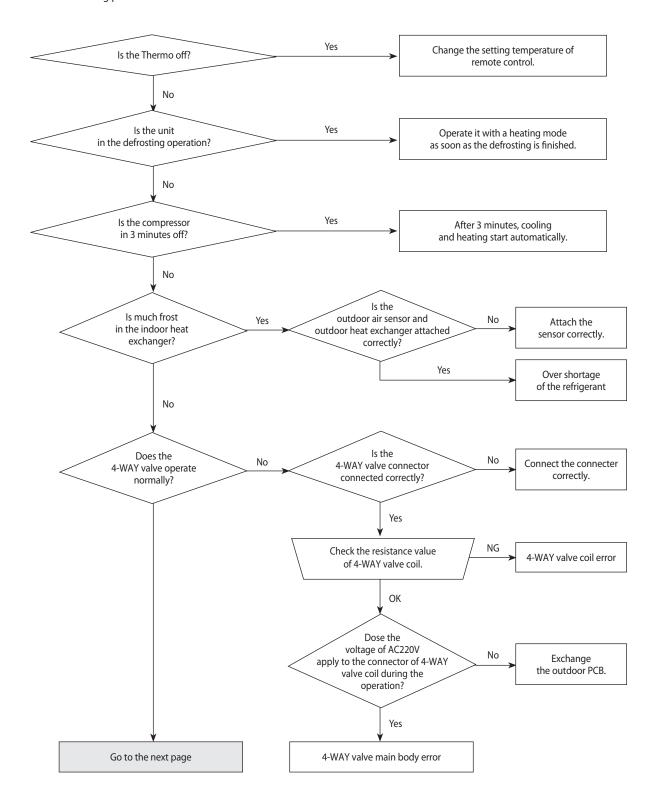
Error code	Meaning	Troubleshooting
E177	Emergency stop	Indoor unit (Control kit) orders emergency stop. Check the indoor unit (Control kit).
E201	Control Kit quantity is mismatched.	Control kit quantity must be matched with outdoor unit 1 by 1. Check the Control kit quantity. It must be 1EA.
E403	Detection of outdoor freezing when compressor stops.	Outdoor unit (Condenser) froze. Check condenser.
E404	Protection of outdoor overload when compressor stops.	Compressor is overloaded. Please check same as E461 and check compressor when it starts.
E416	Discharge temperature of a compressor in an outdoor unit is overheated.	Discharge temperature is overheated.
E440	Heating operation is not available since the outdoor air temperature is over 35°C.	Chack the outdoor temporature
E441	Cooling operation is not available since the outdoor air temperature is lower than -15°C.	Check the outdoor temperature.
E465	Compressor over load error	Compressor is overloaded. Please check same as E461 and check compressor when it starts.
E468	Current sensor error	Exchange INVERTER PBA.
E471	Outdoor EEPROM error	EEPROM date is wrong. Exchange EEPROM or MAIN PBA. (This error don't occur in EMF 150-AM)
E474	IPM(IGBT Module) or PFCM temperature sensor error	Exchange INVERTER PBA.
E484	PFC overload error	Check reactor located in control plate. If reactor is normal, exchange INVERTER PBA.
E500	IPM is over heated.	Check INVERTER PBA's temperature. Power off and cool down INVERTER PBA, and then restart the outdoor unit.
E556	Capacity mismatching between indoor and outdoor	EEPROM data is wrong. Exchange EEPROM or MAIN PBA
E557	Option code miss matching among the indoors(only for DPM)	Option setting data is wrong. (This error don't occur in EMF 150-AM)

64 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 64 2012-08-07 4:29:33

4-5-11 In case of heating at the cooling mode or cooling at the heating mode

1. Troubleshooting procedure

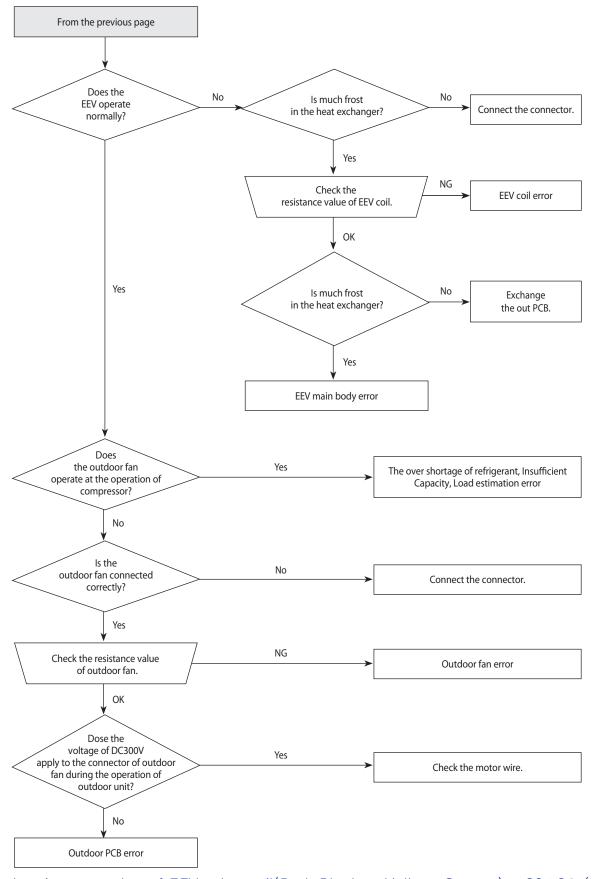


* Normal resistance value of 4 way valve coil: 1.5±0.15k\(\Omega\) (at 20°C)

Samsung Electronics 65

RC160MHXGA_SM_E_34513A(1)_4.indd 65 2012-08-07 4:29:34

In case of heating at the cooling mode or cooling at the heating mode (cont.)



* Normal resistance value of EEV valve coil(Red-Black or Yellow-Orange) : 92±8Ω (at 20℃)

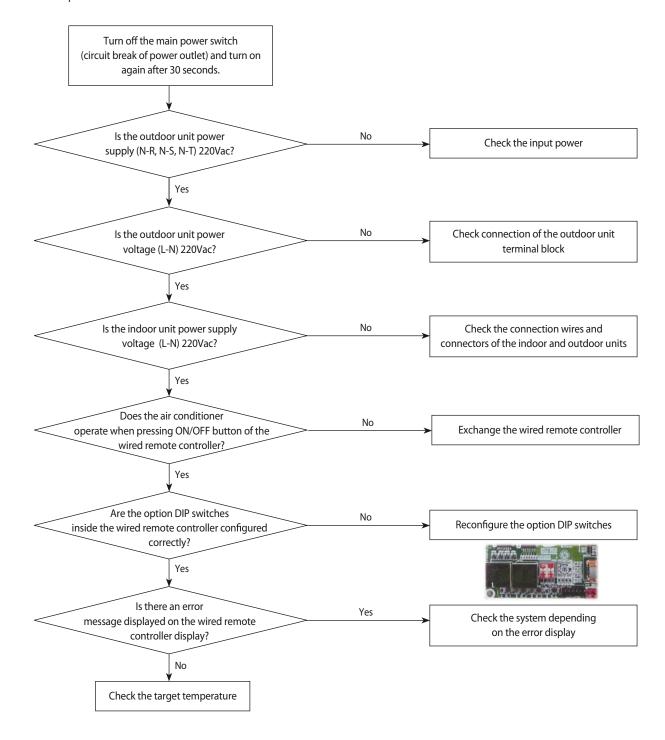
66 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 66 2012-08-07 4:29:34

4-5-12 Outdoor unit is not powered on - Initial diagnosis

- 1. Check items
 - 1) Is the power supply voltage 380V?
 - 2) Is the AC power connected correctly?
 - 3) Are the LEDs in the main PCB and inverter PCB of the outdoor unit ON?
 - 4) Is the input power voltage of the indoor unit 220V?
 - 5) Is the wired remote controller connected correctly?

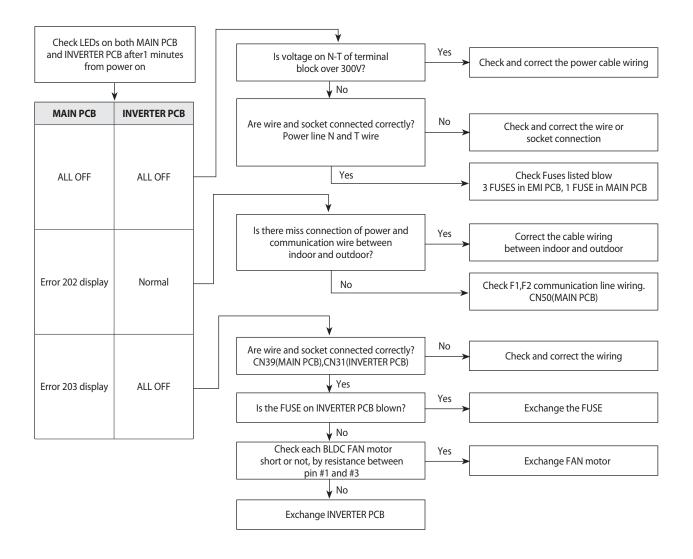
2. Check procedure



4-5-13 Outdoor unit power supply error

- 1. Checklist:
 - 1) Are the input power voltage and power connection correct?
 - 2) Is there any Fuse Short of the indoor or outdoor unit?
 - 3) Is any LED lit on both MAIN PCB and INVERTER PCB?
 - 4) Are Reactor wires of the outdoor unit connected correctly?

2. Troubleshooting procedure



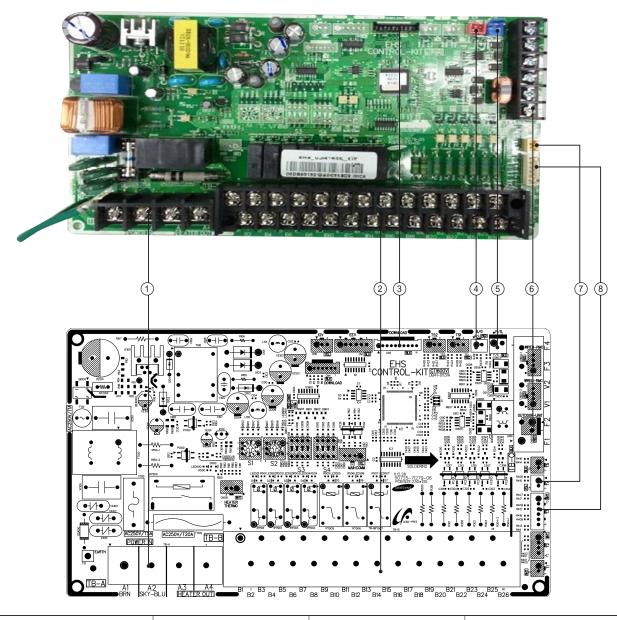
68 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_4.indd 68 2012-08-07 4:29:34

5. PCB Diagram

5-1 Hydro unit

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TB-A – POWER IN / HEATER #1(L): Phase L #2(N): Phase N #3: HEATER #4: HEATER	② TB-B – TERMINAL BLOCK #1~26 : Check WIRING DIAGRAM	③ CN2 - DOWNLOAD	S/G – SMART GRID #1: SMART GRID sensor #2: GND
⑤ F/S – FLOW S/W #1 : FLOW SWITCH sensor #2 : GND	© TB-C - COM1/COM2 Communication F1: Communication signal F1 F2: Communication signal F2 V1: DC12V V2: GND F3: Communication signal F3 F4: Communication signal F4	7 T4: WATER TANK sensor #1: WATER TANK sensor #2: GND	® T3: HEATER sensor #1: HEATER OUT sensor #2: GND #3~#6: Not used

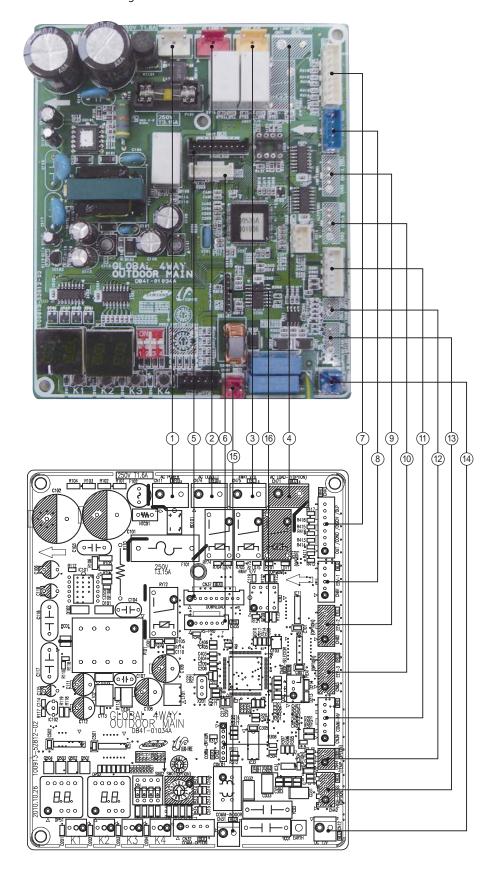
Samsung Electronics 69

RC160MHXGA_SM_E_34513A(1)_5~8.indd 69 2012-08-07 4:31:03

5-2 Outdoor Unit

MAIN PCB

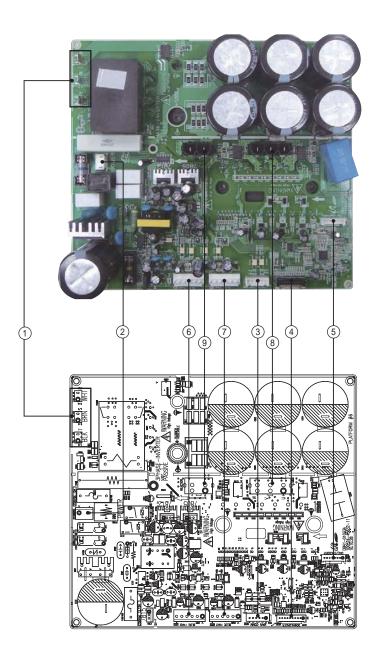
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① CN11-AC POWER #1-#3:220~240Vac	② CN74-AC LOAD1 #1-#3:220~240Vac	③ CN75-4WAY V/V #1-#3:220~240Vac	4 CN71-AC LOAD2(Option) #1-#3: 220~240Vac
(§) CN37-Micom Download #1:RXD_INV #2:TXD_INV #3,#8:N.C #4~#7:Data signal #9:GND #10:DC 5V	(§) CN35-AS-PRO #1: DC 5V #2: MODE #3: Reset #4~#6: GRID_3/1/2 #7: GND	© CN43-Sensor #1-#2: Outdoor Temp. #3-#4: Cond. Temp. #5-#6: Discharge Temp. #7-#8: OLP Temp.	8 CN81-EEV 1 #1~#4: Motor signal #5: DC 12V
CN82-EEV 2(Option) #1~#4: Motor signal #5: DC 12V	(1) CN83-EEV 3(Option) #1~#4: Motor signal #5: DC 12V	(1) CN39-COMM-INV #1:TXD #2:RXD #3:GND #4:DC:5V #5:DC:12V #6:INV.SMPS signal	① CN44-TEMP OPTION(Option) #1: Temp. signal #2: GND
(3) CN42-High Pressure(Option) #1: High Pressure temp. signal #3: GND #4: DC 5V	(4) CN12-DC12V #1:DC 12V #2:GND	(§ CN31-Comm. #1:COM1 #2:COM2	(6) CN33-Sub Comm. #1: DC 12V #2: GND #3: DC 5V #4: COM1 #5: COM2

INVERTER PCB

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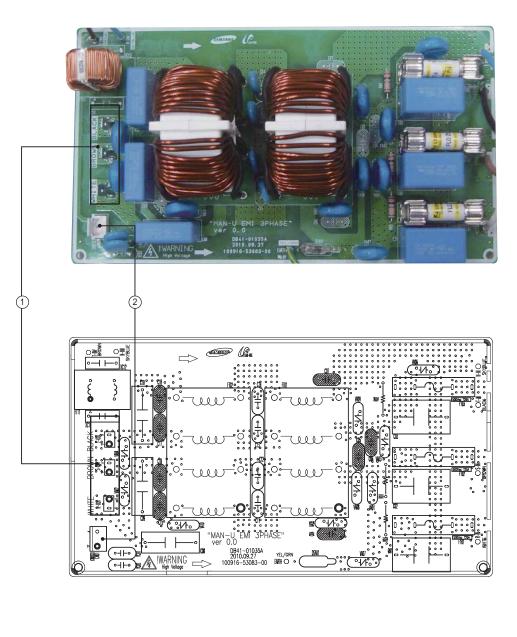
① RST-AC POWER 3phase #R: AC 380~400V: WHT #S: AC 380~400V: BRN #T: AC 380~400V: BLK	② CN100-AC POWER #1-#3: AC 220~240V	3 CN31-MAIN COMM #1:RXD,#2:TXD #3:GND,#4:DC5V #5:DC12V,#6:INV.SMPS signal	(*) CN22-Downloader #1: RXD_ATARO, #2: TXD_ATARO #3, #8: N.C, #4~#7: DATA signal #9: GND, #10: DC 5V
⑤ CN21-DAC/ENCODER For S/W engineer debugging	(6) CN91-FAN2 #1: DC 360V, #2: N.C #3: GND, #4: DC 15V #5: FAN RPM, #6: FAN RPM feedback	© CN90-FAN1 #1: DC 360V, #2: N.C #3: GND, #4: DC 15V #5: FAN RPM, #6: FAN RPM feedback	8 CN800-COMP. #1 : COMP. U-phase(RED) #2 : COMP. V-phase(BLU) #3 : COMP. U-phase(YEL)
© CN600-REACTOR #1-#2: DCL Reactor			

72 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_5~8.indd 72 2012-08-07 4:31:24

EMI PCB

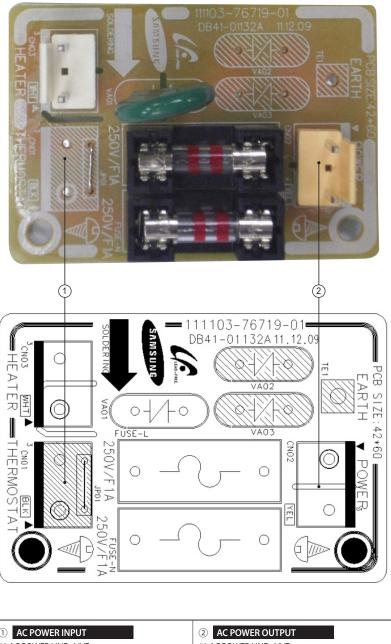
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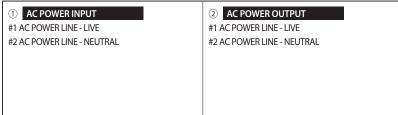


① RST-AC POWER 3phase
#R: AC 380~400V: WHT
#5: AC 380~400V: BRN
#T: AC 380~400V: BLK

Heater PCB

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5-3 Parts List

MAIN PCB

Location	Code	Description	Spec.	Q`ty	Unit	SA/ SNA
	DB93-11109D	ASSY PCB MAIN-OUT	EHS Remko 14KW,Inverter Platform #4, #5, #6 MAIN,Y,SMPS,TOP264VG,5Vdc, 12Vdc	1	PC	SA
	DB93-11363C	ASSY PCB MANUAL	EHS Outdoor Main,14KW REMKO	1	PC	SNA
ADHESIVE- SILICON	0201-001982	ADHESIVE-SIL	TSE3854DS-W,White,2.2,MIL-A-46146B,UL94V-0	0.005	KG	SNA
SOLDER-BAR	0202-001338	SOLDER-BAR	LeeD-free Solder BAR,W20L350H8,99.3Sn/0.7Cu/0.01 P	10	G	SNA
SOLDER-WIRE	0202-001608	SOLDER-WIRE FLUX	LFC7-107,D0.8,99.3Sn/0.7Cu/0.01P,Flux3-4%	2	G	SNA
FLUX	0204-002978	FLUX	KSP-70M,84%,FLUX,SPRAY	1	G	SNA
SOLVENT	0204-003174	SOLVENT	S-E70,R-OH,100%,0.790	2	G	SNA
IC102	1203-000002	IC-POSI.ADJUST REG.	431,TO-92,3P,-,PLASTIC,2.44/2.58V,775MV,0TO+70C,10 0MA,-,ST,-	1	PC	SNA
IC101	1203-006612	IC-PWM CONTROLLER	TOP264VG,DIP,12P,10.16x10.46mm,PLASTIC,TP	1	PC	SNA
NTC01	1404-001274	THERMISTOR-NTC	22ohm,1.4A,3100K,9.5mW/C,-,7.0,-	1	PC	SNA
X201	2802-001179	RESONATOR-CERAMIC	4MHZ,0.5%,BK,8X3X5.5MM	1	PC	SNA
K1	3404-000165	SWITCH-TACT	12V,50mA,160gf,6x6x5,SPST	1	PC	SNA
K2	3404-000165	SWITCH-TACT	12V,50mA,160gf,6x6x5,SPST	1	PC	SNA
К3	3404-000165	SWITCH-TACT	12V,50mA,160gf,6x6x5,SPST	1	PC	SNA
K4	3404-000165	SWITCH-TACT	12V,50mA,160gf,6x6x5,SPST	1	PC	SNA
SW02	3407-000121	SWITCH-DIP	24V,300mA,SLIDE,STANDARD	1	PC	SNA
RY72	3501-001163	RELAY-MINIATURE	12V,200mW,5000mA,1FormA,10ms,5ms	1	PC	SNA
RY73	3501-001163	RELAY-MINIATURE	12V,200mW,5000mA,1FormA,10ms,5ms	1	PC	SNA
RY74	3501-001163	RELAY-MINIATURE	12V,200mW,5000mA,1FormA,10ms,5ms	1	PC	SNA
FUSE02	3601-000263	FUSE-CARTRIDGE	250V,3.15A,TIME-LAG,GLASS,5x20mm	1	PC	SA
F101	3602-001012	FUSE-BLOCK	500V,-,100MOhm	1	PC	SNA
IC83	3704-001601	SOCKET-IC	8P,SN,2.54mm	1	PC	SNA
CN45	3711-000024	HEADER-BOARD TO CABLE	BOX,3P,1R,2.5MM,STRAIGHT,SN,WHT	1	PC	SNA
CN12	3711-000176	HEADER-BOARD TO CABLE	1WALL,2P,1R,3.96mm,STRAIGHT,SN,BLU	1	PC	SNA
CN31	3711-000177	HEADER-BOARD TO CABLE	1WALL,2P,1R,3.96MM,STRAIGHT,SN,RED	1	PC	SNA
CN11	3711-000203	HEADER-BOARD TO CABLE	1WALL,2P/3P,1R,7.92mm,STRAIGHT,SN,WHT	1	PC	SNA
CN32	3711-000996	CONNECTOR-HEADER	BOX,5P,1R,2.5mm,STRAIGHT,SN,BLK	1	PC	SNA
CN81	3711-000997	CONNECTOR-HEADER	BOX,5P,1R,2.5mm,STRAIGHT,SN,BLU	1	PC	SNA
CN39	3711-001038	HEADER-BOARD TO CABLE	BOX,6P,1R,2.5mm,STRAIGHT,SN,WHT	1	PC	SNA
CN43	3711-001084	HEADER-BOARD TO CABLE	BOX,8P,1R,2.5MM,STRAIGHT,SN,WHT	1	PC	SNA
CN75	3711-003406	HEADER-BOARD TO CABLE	1WALL,2P,1R,7.92MM,STRAIGHT,SN,YEL	1	PC	SNA
CN74	3711-003407	HEADER-BOARD TO CABLE	1WALL,2P,1R,7.92MM,STRAIGHT,SN,RED	1	PC	SNA
CN35	3711-003873	HEADER-BOARD TO CABLE	BOX,7P,1R,2mm,STRAIGHT,SN,WHT	1	PC	SNA
CN37	3711-005716	HEADER-BOARD TO CABLE	BOX,10P,1R,2mm,STRAIGHT,SN,BLK	1	PC	SNA
CN33	3711-007422	HEADER-BOARD TO BOARD	7P,1R,2mm,STRAIGHT,BRASS,BLK	1	PC	SNA
DP51	DB07-00054A	LED DISPLAY	SSD-A3202GS-A13,LED DISPLAY,2 DIGIT,16 SEGMENT,2 DIGIT,16.6x16x13mm,GREEN,50mW,9	1	PC	SNA
DP52	DB07-00054A	LED DISPLAY	SSD-A3202GS-A13,LED DISPLAY,2 DIGIT,16 SEGMENT,2 DIGIT,16.6x16x13mm,GREEN,50mW,9	1	PC	SNA
PT01	DB26-00122A	TRANS SWITCHING	EE2525,RC100PHXEA,GLOBAL 4WAY,310V,200~400V,PL-7, PM- 7,5V,12V,ER25*25 V10,50HZ,1.56mH,MULTI OUTPUT	1	PC	SNA

Location	Code	Description	Spec.	Q`ty	Unit	SA/ SNA
COIL01	DB27-00082A	COIL CHOKE	CV305400SJ,RC100PHXEA,GLOBAL 4WAY,40mH,+50~-30%,706mohm,0.5A,13*7*5,16*18.5*10,3.4mm*8.4mm,1.2mm,PAD,-25°C~+105°C	1	PC	SNA
ASSY CW EARTH	DB93-05379G	ASSY CONNECTOR WIRE EARTH	RC140RHXEA	1	PC	SNA
	DB93-11372C	ASSY PCB AUTO	EHS Outdoor Main,14KW REMKO	1	PC	SNA
R110	2003-000855	R-METAL OXIDE(S)	47Kohm,5%,3W,AA,TP,6x16mm	1	PC	SNA
C103	2201-000322	C-CERAMIC,DISC	2.2nF,10%,2000V,Y5P,13x5mm,10mm	1	PC	SNA
C107	2201-000551	C-CERAMIC,DISC	0.47nF,10%,1000V,Y5P,6.3x5mm,5mm	1	PC	SNA
C104	2201-000983	C-CERAMIC,DISC	1nF,10%,2000V,Y5P,TP,9x5mm,7.5mm	1	PC	SNA
C116	2201-000987	C-CERAMIC,DISC	2.2nF,20%,400V,Y5U,TP,12.5x6mm,10mm	1	PC	SNA
C117	2201-000987	C-CERAMIC,DISC	2.2nF,20%,400V,Y5U,TP,12.5x6mm,10mm	1	PC	SNA
YC01	2301-001220	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12mm	1	PC	SNA
YC02	2301-001220	C-FILM,LEAD-PPF	100nF,10%,275V,BK,18x6x12mm	1	PC	SNA
C118	2401-000481	C-AL	10uF,20%,50V,WT,TP,5x11,5	1	PC	SNA
C111	2401-001103	C-AL	330uF,20%,16V,WT,TP,8x11.5mm,5	1	PC	SNA
C112	2401-001103	C-AL	330uF,20%,16V,WT,TP,8x11.5mm,5	1	PC	SNA
C108	2401-001838	C-AL	470uF,20%,25V,WT,TP,10x16,5	1	PC	SNA
C109	2401-001838	C-AL	470uF,20%,25V,WT,TP,10x16,5	1	PC	SNA
C106	2401-002438	C-AL	47uF,20%,50V,WT,TP,6.3x11,5mm	1	PC	SNA
C115	2401-003645	C-AL	1UF,20%,50V,WT,TP,4X5MM,5	1	PC	SNA
C101	2401-003861	C-AL	68UF,20%,400V,WT,TP,18X25MM,7.5	1	PC	SNA
C102	2401-003861	C-AL	68UF,20%,400V,WT,TP,18X25MM,7.5	1	PC	SNA
F102	3601-001308	FUSE	250V,1.6A,TIME-LAG,PLASTIC,8.4x7.6mm	1	PC	SNA
	DB93-11369C	ASSY PCB SMD	EHS Outdoor Main,14KW REMKO	1	PC	SNA
SOLDER- CREAM	0202-001459	SOLDER-CREAM	S3X58-M405,D20~38um,96.5Sn/3Ag/0.5Cu,FLUX 5%	10	G	SNA
D105	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D201	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D202	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D203	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D204	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D209	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D210	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D211	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D212	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D213	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D214	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D391	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D392	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SNA
D104	0402-001192	DIODE-RECTIFIER	ES2D,200V,2A,SMB,TP	1	PC	SNA
BD101	0402-001298	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	1	PC	SNA
D102	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	PC	SNA
D103	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	PC	SNA
D101	0402-001429	DIODE-RECTIFIER	US1J,600V,1A,DO-214AC,TP	1	PC	SNA
CD31	0406-001204	DIODE-TVS	SMBJ5.0CA,6.4/-/7.25V,600W,SMB	1	PC	SNA
CD32	0406-001204	DIODE-TVS	SMBJ5.0CA,6.4/-/7.25V,600W,SMB	1	PC	SNA

Location	Code	Description	Spec.	Q`ty	Unit	SA/ SNA
CD33	0406-001204	DIODE-TVS	SMBJ5.0CA,6.4/-/7.25V,600W,SMB	1	PC	SNA
Q501	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	PC	SNA
Q502	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	PC	SNA
Q503	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	PC	SNA
Q504	0504-000001	TR-DIGITAL	DTA114EKA,PNP,200mW,10K/10K,SOT-23,TP	1	PC	SNA
Q103	0504-000127	TR-DIGITAL	FJV3102R,NPN,200mW,10K/10Kohm,SOT-23,TP	1	PC	SNA
IC51	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	PC	SNA
IC52	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	PC	SNA
IC71	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	PC	SNA
IC81	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	PC	SNA
LD74	0601-001816	LED	SMD,Y-GRN,1.6X0.8X0.55MM,570NM,1.6X0.8X0.55MM	1	PC	SNA
LD75	0601-001816	LED	SMD,Y-GRN,1.6X0.8X0.55MM,570NM,1.6X0.8X0.55MM	1	PC	SNA
LD01	0601-002345	LED	SMD,RED,1.6x0.8x0.55mm,660nm,1.6x0.8x0.55mm	1	PC	SNA
PC01	0604-001172	PHOTO-COUPLER	TR,150-300,200mW,SOP,TP	1	PC	SNA
IC32	0801-000393	IC-CMOS LOGIC	74HC86,OR GATE,SOP,14P,150MIL,QUAD,ST,- ,2.0/6.0V,0.26V,- 40to+85C,180mW,4.2V,1uA,	1	PC	SNA
IC31	1006-001325	IC-BUS TRANSCEIVER	ISL81487LIBZ,SO,8P,4.9x3.8 mm,SINGLE,ST,PLASTIC,5V,- 40to+85C,520mW,1,1,1.5/5.0V	1	PC	SNA
R202	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R203	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
R309	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
R310	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
R411	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
R413	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
R415	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
R417	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
R121	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R302	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R303	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R501	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R502	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R503	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R504	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R505	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R506	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R507	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	SNA
R704	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	1	PC	SNA
R705	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	1	PC	SNA
R304	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SNA
R305	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SNA
R306	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SNA
R307	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SNA
R308	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SNA
R311	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SNA
R312	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SNA

Location	Code	Description	Spec.	Q`ty	Unit	S/ SN
R313	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SI
R314	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SI
R391	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	S
R512	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	S
R513	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	S
R514	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	S
R515	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	S
R201	2007-000116	R-CHIP	120ohm,5%,1/10W,TP,1608	1	PC	S
R301	2007-000116	R-CHIP	120ohm,5%,1/10W,TP,1608	1	PC	S
R100	2007-000134	R-CHIP	33Kohm,5%,1/10W,TP,1608	1	PC	S
R221	2007-000238	R-CHIP	1.5Kohm,1%,1/8W,TP,2012	1	PC	S
R118	2007-000297	R-CHIP	10Kohm,1%,1/8W,TP,2012	1	PC	S
R119	2007-000297	R-CHIP	10Kohm,1%,1/8W,TP,2012	1	PC	S
R111	2007-000409	R-CHIP	15Kohm,5%,1/8W,TP,2012	1	PC	S
R108	2007-000441	R-CHIP	180Kohm,1%,1/8W,TP,2012	1	PC	S
R412	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	PC	S
R414	2007-000455	R-CHIP	18Kohm,1%,1/10W,TP,1608	1	PC	S
R101	2007-000481	R-CHIP	1Mohm,5%,1/4W,TP,3216	1	PC	S
R102	2007-000481	R-CHIP	1Mohm,5%,1/4W,TP,3216	1	PC	S
R103	2007-000481	R-CHIP	1Mohm,5%,1/4W,TP,3216	1	PC	S
R104	2007-000481	R-CHIP	1Mohm,5%,1/4W,TP,3216	1	PC	S
R113	2007-000592	R-CHIP	22ohm,1%,1/4W,TP,3216	1	PC	S
R416	2007-000532	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	PC	S
R418	2007-000614	R-CHIP	24Kohm,1%,1/10W,TP,1608	1	PC	S
R117	2007-000614	R-CHIP	3.3Kohm,1%,1/10W,TP,1608	1	PC	S
R114	2007-00083	R-CHIP	3.6Kohm,1%,1/10W,TP,1608	1	PC	S
R340	2007-000701	R-CHIP	4.7Kohm,1%,1/10W,TP,1608	1	PC	S
R109	2007-000809	R-CHIP	47Kohm,5%,1/8W,TP,2012	1	PC	S
R120	2007-000941	R-CHIP	47Kohm,5%,1/8W,TP,2012	1	PC	S
	2007-000941				PC	+
R115		R-CHIP	68ohm,1%,1/10W,TP,1608	1		S
R105	2007-007385	R-CHIP	1.2Mohm,1%,1/4w,TP,3216	1	PC	S
R106	2007-007385	R-CHIP	1.2Mohm,1%,1/4w,TP32316	1	PC	S
R107	2007-007385	R-CHIP	1.2Mohm,1%,1/4w,TP,3216	1	PC	S
R112	2007-010635	R-CHIP	6.8ohm,1%,1/10,TP,1608	1	PC	S
C301	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	S
C302	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	S
C303	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	S
C512	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	S
C513	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	S
C514	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	S
C515	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	S
C120	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	S
C215	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	S
C203	2203-002304	C-CER,CHIP	10pF,5%,50V,TH,BK,1608,-	1	PC	S
C105	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	S
C110	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	S
C113	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	S

Location	Code	Description	Spec.	Q`ty	Unit	SA/ SNA
C114	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C119	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C202	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C204	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C205	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C206	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C207	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C208	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C209	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C211	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C212	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C213	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C214	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C216	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C217	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C304	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C305	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C311	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C312	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C403	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C404	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C405	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C406	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C501	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C502	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C701	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C801	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SNA
C201	2203-006348	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1	PC	SNA
C210	2203-006348	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1	PC	SNA
C221	2203-006348	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1	PC	SNA
L101	2703-002297	INDUCTOR-SMD	4.7uH,20%,6060	1	PC	SNA
L102	2703-002297	INDUCTOR-SMD	4.7uH,20%,6060	1	PC	SNA
РСВ	DB41-01034A	PCB MAIN-OUT	GLOBAL-4WAY OUTDOOR,FR-4,2,ver 2.4,T1.6,120*142,UB1, UB2, UB3,Outdoor,Inverter Platform #4, #5, #6 MAIN,600	1	PC	SNA
IC21	DB91-01333A	ASSY-MIC	Gen3 Outdoor,STM-10A5-OS, S3F4A1H, 100TQFP, ROM 512KB	1	PC	SNA
	DB09-00535A	IC MICOM	S3F4A1H,100P,DC5V,12 MHz,TQFP,16 Bit,16 Bit,TQFP,QFP,16 Bit,- 40~+105,512K	1	PC	SNA

INVERTER PCB

Location	Code	Description	Spec.	Q`ty	Unit	SA/ SNA
-	DB93-11114A	ASSY PCB MAIN-INVERTER	RC100DHXGA, RC100PHXGA, RC125PHXGA, RC125DHXGA,Inverter Platform #6,Y,SMPS,TOP243P,3.3V, 5V, 12V, 15V	1	PC	SA
-	DB93-11362A	ASSY PCB MANUAL	RC100DHXGA, RC140DHXGA,Inverter #6, 3phase	1	PC	SNA
ADHESIVE- SILICON	0201-001982	ADHESIVE-SIL	TSE3854DS-W,White,2.2,MIL-A-46146B,UL94V-0	0.02	KG	SNA
SOLDER BAR	0202-001338	SOLDER-BAR	LeeD-free Solder BAR,W20L350H8,99.3Sn/0.7Cu/0.01P	12.4	G	SNA
SOLDER WIRE	0202-001608	SOLDER-WIRE FLUX	LFC7-107,D0.8,99.3Sn/0.7Cu/0.01P,Flux3-4%	3.2	G	SNA
FLUX	0204-002978	FLUX	KSP-70M,84%,FLUX,SPRAY	10	G	SNA
SOLVENT	0204-003174	SOLVENT	S-E70,R-OH,100%,0.790	10	G	SN/
IC601	0402-001994	DIODE-BRIDGE	DF30NA160,1600V,30A,SIP-5,ST	1	PC	SN
IC104	1203-002735	IC-POSI.FIXED REG.	KIA7815API,TO-220IS,3P,10.3x15.3mm,PLASTIC,14.4/15.6V, 2W,-30to+150,1A,ST	1	PC	SN
IC101	1203-003527	IC-PWM CONTROLLER	TOP243,DIP,7P,9.83x6.6mm,plastic,-0.3/700V,25W,- 40to+150,1.44A,TP	1	PC	SN
PT100	1404-001498	THERMISTOR-PTC	40ohm,25%,290Vac,7A,TR	1	PC	SN
VA100	1405-000154	VARISTOR	460Vdc,2500A,17.5x7.5mm,TP	1	PC	SN
C820	2301-001830	C-FILM,MPEF	1000nF,5%,1000V,BK,28x18x31	1	PC	SN
C602	2401-004278	C-AL	560uF,20%,400V,WT,BK,35x50mm,14.2mm	1	PC	SN
C603	2401-004278	C-AL	560uF,20%,400V,WT,BK,35x50mm,14.2mm	1	PC	SN
C604	2401-004278	C-AL	560uF,20%,400V,WT,BK,35x50mm,14.2mm	1	PC	SN
C605	2401-004278	C-AL	560uF,20%,400V,WT,BK,35x50mm,14.2mm	1	PC	SN
C606	2401-004278	C-AL	560uF,20%,400V,WT,BK,35x50mm,14.2mm	1	PC	SN
C607	2401-004278	C-AL	560uF,20%,400V,WT,BK,35x50mm,14.2mm	1	PC	SN
C123	2401-004279	C-AL	560uF,20%,400V,WT,BK,35x50mm,14.2mm	1	PC	SN
L100	2702-001123	INDUCTOR-RADIAL	4.7uH,10%,6.5x7.5mm	1	PC	SN
RY12	3501-001163	RELAY-MINIATURE	12V,200mW,5000mA,1FormA,10ms,5ms	1	PC	SN
RY13	3501-001163	RELAY-MINIATURE	12V,200mW,5000mA,1FormA,10ms,5ms	1	PC	SN
RY11	3501-001264	RELAY-POWER	12V,200mW,5000mA,1FormA,10ms,10ms	1	PC	SN
RY14	3501-001264	RELAY-POWER	12V,200mW,5000mA,1FormA,10ms,10ms	1	PC	SN
RY600	3501-001411	RELAY-POWER	12V,30000mA,2FormA	1	PC	SN
FUSE400-1	3601-000263	FUSE-CARTRIDGE	250V,3.15A,TIME-LAG,GLASS,5x20mm	1	PC	SA
FUSE100-1	3601-000297	FUSE-CARTRIDGE	250V,5A,TIME-LAG,GLASS,5.2x20mm	1	PC	SA
FUSE100	3602-001012	FUSE-BLOCK	500V,-,100MOhm	1	PC	SN
FUSE400	3602-001012	FUSE-BLOCK	500V,-,100MOhm	1	PC	SN
CN100	3711-000203	HEADER-BOARD TO CABLE	1WALL,2P/3P,1R,7.92mm,STRAIGHT,SN,WHT 1	1	PC	SN
CN90	3711-000296	HEADER-BOARD TO CABLE	1WALL,6P,1R,3.96MM,STRAIGHT,SN,WHT	1	PC	SN
CN91	3711-000296	HEADER-BOARD TO CABLE	1WALL,6P,1R,3.96MM,STRAIGHT,SN,WHT	1	PC	SN
CN31	3711-001038	HEADER-BOARD TO CABLE	BOX,6P,1R,2.5mm,STRAIGHT,SN,WHT	1	PC	SN
CN21	3711-003843	HEADER-BOARD TO CABLE	BOX,8P,1R,2mm,STRAIGHT,SN,WHT	1	PC	SN
CN800	3711-007276	CONNECTOR-HEADER	3P,1R,10mm,STRAIGHT,AU,BLK	1	PC	SN
CN600	3711-007649	CONNECTOR-HEADER	2,1R,10mm,STRAIGHT,BRASS,BLK	1	PC	SN
CN22	3711-007706	HEADER-BOARD TO CABLE	BOX,10P,1R,2mm,STRAIGHT,SN,RED	1	PC	SN
R-IN	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	1	PC	SN
S-IN	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	1	PC	SN
T-IN	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	1	PC	SN
IPM800	4719-002494	POWER MODULE I	IPM,1200V/35A	1	PC	SN
ST11	DB26-00123A	TRANS SWITCHING	EE2218,RC100PHXEA,GLOBAL 4WAY,310V,200~400V,PL-7, PM-1 PCSNA	1	PC	SN
	DB93-11373A	ASSY PCB AUTO	RC100DHXGA, RC140DHXGA,Inverter #6, 1phase	1	PC	SN
D102	0402-000012	DIODE-RECTIFIER	UF4007,1000V,1A,DO-41,TP	1	PC	SN
ZD800	0406-001434	DIODE-TVS	P6KE18A,200,185,215,DO-15	1	PC	SN

Location	Code	Description	Spec.	Q`ty	Unit	SA/ SN/
R101	2003-000855	R-METAL OXIDE(S)	47Kohm,5%,3W,AA,TP,6x16mm	1	PC	SNA
R108	2006-001149	R-CEMENT,NON	1Kohm,5%,15W,CA,BK,48x12.5x12.5mm	1	PC	SNA
C101	2201-000154	C-CERAMIC,DISC	10nF,+80-20%,2000V,Y5P,20x5mm,7.5mm	1	PC	SNA
C102	2201-000322	C-CERAMIC,DISC	2.2nF,10%,2000V,Y5P,13x5mm,10mm	1	PC	SNA
C103	2201-000551	C-CERAMIC,DISC	0.47nF,10%,1000V,Y5P,6.3x5mm,5mm	1	PC	SN
C106	2201-000551	C-CERAMIC,DISC	0.47nF,10%,1000V,Y5P,6.3x5mm,5mm	1	PC	SN
C113	2201-000551	C-CERAMIC,DISC	0.47nF,10%,1000V,Y5P,6.3x5mm,5mm	1	PC	SN
C119	2201-000551	C-CERAMIC,DISC	0.47nF,10%,1000V,Y5P,6.3x5mm,5mm	1	PC	SN
C104	2401-000481	C-AL	10uF,20%,50V,WT,TP,5x11,5	1	PC	SN
C124	2401-000481	C-AL	10uF,20%,50V,WT,TP,5x11,5	1	PC	SN
C125	2401-000481	C-AL	10uF,20%,50V,WT,TP,5x11,5	1	PC	SN
C201	2401-000481	C-AL	10uF,20%,50V,WT,TP,5x11,5	1	PC	SN
C300	2401-000481	C-AL	10uF,20%,50V,WT,TP,5x11,5	1	PC	SN
C326	2401-000481	C-AL	10uF,20%,50V,WT,TP,5x11,5	1	PC	SN
C405	2401-000481	C-AL	10uF,20%,50V,WT,TP,5x11,5	1	PC	SN
C407	2401-000481	C-AL	10uF,20%,50V,WT,TP,5x11,5	1	PC	SN
C407	2401-002438	C-AL	47uF,20%,50V,WT,TP,6.3x11,5mm	1	PC	SN
C807	2401-002438	C-AL	47uF,20%,50V,WT,TP,6.3x11,5mm	1	PC	SN
C807	2401-002438	C-AL	47uF,20%,50V,WT,TP,6.3x11,5mm	1	PC	SN
C813	2401-002438	C-AL	47uF,20%,50V,WT,TP,6.3x11,5mm	1	PC	SN
C107	2401-002438	C-AL		1	PC	SN
			220uF,20%,35V,WT,TP,8x11.5mm,5			
C109	2401-003585	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	1	PC	SN
C112	2401-003585	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	1	PC	SN
C114	2401-003585	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	1	PC	SN
C115	2401-003585	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	1	PC	SN
C117	2401-003585	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	1	PC	SN
C120	2401-003585	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	1	PC	SN
C121	2401-003585	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	1	PC	SN
C401	2401-003585	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	1	PC	SN
C403	2401-003585	C-AL	220uF,20%,35V,WT,TP,8x11.5mm,5	1	PC	SN
	DB93-11368A	ASSY PCB SMD	RC100DHXGA, RC140DHXGA,Inverter #6, 3phase	1	PC	SN
OLDER CREAM	0202-001459	SOLDER-CREAM	S3X58-M405,D20~38um,96.5Sn/3Ag/0.5Cu,FLUX 5%	3.8	G	SN
D107	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D300	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D301	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D303	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D304	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D600	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D601	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D700	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D701	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D702	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D703	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D901	0401-001099	DIODE-SWITCHING	1N4148WS,75V,150mA,SOD-323,TP	1	PC	SN
D104	0402-001192	DIODE-RECTIFIER	ES2D,200V,2A,SMB,TP	1	PC	SN
D105	0402-001192	DIODE-RECTIFIER	ES2D,200V,2A,SMB,TP	1	PC	SN
D100	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	PC	SN
D103	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	PC	SN
D400	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	PC	SN
D401	0402-001427	DIODE-RECTIFIER	ES1D,200V,1A,DO-214AC,TP	1	PC	SN

Location	Code	Description	Spec.	Q`ty	Unit	SA/ SNA
D800	0402-001993	DIODE-RECTIFIER	STTH112,1200V,1A,SMA	1	PC	SNA
D801	0402-001993	DIODE-RECTIFIER	STTH112,1200V,1A,SMA	1	PC	SNA
D802	0402-001993	DIODE-RECTIFIER	STTH112,1200V,1A,SMA	1	PC	SNA
ZD600	0403-000282	DIODE-ZENER	MMBZ5232B,5%,300mW,SOT-23,TP	1	PC	SNA
ZD700	0403-000282	DIODE-ZENER	MMBZ5232B,5%,300mW,SOT-23,TP	1	PC	SNA
ZD701	0403-000282	DIODE-ZENER	MMBZ5232B,5%,300mW,SOT-23,TP	1	PC	SNA
ZD801	0403-001816	DIODE-ZENER	1SAM5934BT3,22.8/25.2V,1500mW,SMA,TP	1	PC	SNA
ZD802	0403-001816	DIODE-ZENER	1SAM5934BT3,22.8/25.2V,1500mW,SMA,TP	1	PC	SNA
ZD803	0403-001816	DIODE-ZENER	1SAM5934BT3,22.8/25.2V,1500mW,SMA,TP	1	PC	SNA
D305	0404-001020	DIODE-SCHOTTKY	BAT54C,30V,200mA,SOT-23,TP	1	PC	SNA
Q500	0501-000534	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,180-390	1	PC	SNA
Q400	0504-000127	TR-DIGITAL	FJV3102R,NPN,200mW,10K/10Kohm,SOT-23,TP	1	PC	SNA
Q401	0504-000127	TR-DIGITAL	FJV3102R,NPN,200mW,10K/10Kohm,SOT-23,TP	1	PC	SNA
IC200	0506-000175	TR-ARRAY	2003,NPN,7,1W,SOP-16,ST,1000	1	PC	SNA
LED100	0601-001816	LED	SMD,Y-GRN,1.6X0.8X0.55MM,570NM,1.6X0.8X0.55MM	1	PC	SNA
LED101	0601-001816	LED	SMD,Y-GRN,1.6X0.8X0.55MM,570NM,1.6X0.8X0.55MM	1	PC	SNA
LED102	0601-001816	LED	SMD,Y-GRN,1.6X0.8X0.55MM,570NM,1.6X0.8X0.55MM	1	PC	SNA
LED301	0601-001816	LED	SMD,Y-GRN,1.6X0.8X0.55MM,570NM,1.6X0.8X0.55MM	1	PC	SNA
LED600	0601-001816	LED	SMD,Y-GRN,1.6X0.8X0.55MM,570NM,1.6X0.8X0.55MM	1	PC	SNA
LED300	0601-001954	LED	SMD(TOP VIEW),YEL,1.6x0.8x0.8mm,587nm,1.6x0.8x0.8mm	1	PC	SNA
LED302	0601-002345	LED	SMD,RED,1.6x0.8x0.55mm,660nm,1.6x0.8x0.55mm	1	PC	SNA
PC111	0604-001002	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	1	PC	SNA
PC400	0604-001002	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	1	PC	SNA
PC401	0604-001002	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	1	PC	SNA
PC402	0604-001002	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	1	PC	SNA
PC403	0604-001002	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	1	PC	SNA
PC500	0604-001002	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	1	PC	SNA
PC501	0604-001002	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	1	PC	SNA
PC502	0604-001002	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	1	PC	SNA
PC900	0604-001002	PHOTO-COUPLER	TR,100-600%,200mW,SOP-4,TP	1	PC	
PC900	0604-001002	PHOTO-COUPLER	74VHCT245,TRANSCEIVER,TSSOP,20P,173MIL,OCTAL,TP,PLAS	1	PC	SNA
IC300	0801-002530	IC-CMOS LOGIC	TIC,3-STATE,-,0.36V,-40to+85 TL431ACD,SOP,8P,4.9X3.9MM,PLASTIC,36V,1.5W,0TO+70C,15	1	PC	SNA
IC102	1203-002948	IC-POSI.ADJUST REG.	0MA,2.44/2.55V,TP	1	PC	SNA
IC100	1203-005454	IC-POSI.FIXED REG.	LD1117S33-HF,SOT-223,4P,6.5x3.5mm,PLASTIC,3.267/3.333,- 40to+125C,0.8,TP	1	PC	SNA
R808	2007-000043	R-CHIP	1Kohm,1%,1/10W,TP,1608	1	PC	SNA
R339	2007-000070	R-CHIP	0ohm,5%,1/10W,TP,1608	1	PC	SNA
R308	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R337	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R800	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R801	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R803	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R805	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R811	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R813	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R814	2007-000074	R-CHIP	100ohm,5%,1/10W,TP,1608	1	PC	SNA
R325	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
R326	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
R327	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	SNA
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R502 R506 R900	2007-000076	R-CHIP	200 L 50/ 4/40/4/TD4 600			
R900		II CI III	330ohm,5%,1/10W,TP,1608	1	PC	S
	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	5
	2007-000076	R-CHIP	330ohm,5%,1/10W,TP,1608	1	PC	2
R320	2007-000077	R-CHIP	470ohm,5%,1/10W,TP,1608	1	PC	9
R328	2007-000077	R-CHIP	470ohm,5%,1/10W,TP,1608	1	PC	
R505	2007-000077	R-CHIP	470ohm,5%,1/10W,TP,1608	1	PC	
R305	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	:
R306	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	:
R307	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	1
R309	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	1
R310	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	
R312	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	1
R313	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	1
R314	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	ŀ
R317	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	ŀ
R318	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	1
R319	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	T:
R501	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	1
R503	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	1
R504	2007-000078	R-CHIP	1Kohm,5%,1/10W,TP,1608	1	PC	1
R809	2007-000080	R-CHIP	2Kohm,5%,1/10W,TP,1608	1	PC	
R100	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	1	PC	
R105	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	1	PC	
R109	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	1	PC	
R111	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	1	PC	
R600	2007-000082	R-CHIP	3.3Kohm,5%,1/10W,TP,1608	1	PC	
R300	2007-000082	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R301	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R302	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R311	2007-000084	R-CHIP		1	PC	
			4.7Kohm,5%,1/10W,TP,1608			+
R315	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	l :
R321	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	1
R322	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	-
R323	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	:
R324	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	-
R329	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R330	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R331	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R332	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R333	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R334	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R335	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	:
R336	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R400	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	!
R401	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R406	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	
R407	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	:
R614	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	:
R615	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	

Location	Code	Description	Spec.	Q`ty	Unit	SA
R701	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	SN
R702	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	SN
R703	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	SN
R905	2007-000084	R-CHIP	4.7Kohm,5%,1/10W,TP,1608	1	PC	SN
R403	2007-000087	R-CHIP	6.8Kohm,5%,1/10W,TP,1608	1	PC	SN
R410	2007-000087	R-CHIP	6.8Kohm,5%,1/10W,TP,1608	1	PC	SN
R812	2007-000087	R-CHIP	6.8Kohm,5%,1/10W,TP,1608	1	PC	SN
R303	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SN
R316	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SN
R402	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SI
R404	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SI
R409	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SI
R411	2007-000090	R-CHIP	10Kohm,5%,1/10W,TP,1608	1	PC	SI
R340	2007-000109	R-CHIP	1Mohm,5%,1/10W,TP,1608	1	PC	SN
R103	2007-000111	R-CHIP	6.8ohm,5%,1/10W,TP,1608	1	PC	SI
R807	2007-000239	R-CHIP	1.5Kohm,1%,1/10W,TP,1608	1	PC	SI
R901	2007-000285	R-CHIP	100Kohm,5%,1/4W,TP,3216	1	PC	SI
R902	2007-000285	R-CHIP	100Kohm,5%,1/4W,TP,3216	1	PC	SI
R903	2007-000285	R-CHIP	100Kohm,5%,1/4W,TP,3216	1	PC	SI
R904	2007-000285	R-CHIP	100Kohm,5%,1/4W,TP,3216	1	PC	SI
R906	2007-000285	R-CHIP	100Kohm,5%,1/4W,TP,3216	1	PC	SI
R907	2007-000285	R-CHIP	100Kohm,5%,1/4W,TP,3216	1	PC	SI
R908	2007-000285	R-CHIP	100Kohm,5%,1/4W,TP,3216	1	PC	SI
R909	2007-000285	R-CHIP	100Kohm,5%,1/4W,TP,3216	1	PC	SI
R802	2007-000308	R-CHIP	10ohm,5%,1/8W,TP,2012	1	PC	SI
R804	2007-000308	R-CHIP	10ohm,5%,1/8W,TP,2012	1	PC	SI
R806	2007-000308	R-CHIP	10ohm,5%,1/8W,TP,2012	1	PC	SI
R616	2007-000385	R-CHIP	14.3Kohm,1%,1/4W,TP,3216	1	PC	SI
R113	2007-000619	R-CHIP	24ohm,5%,1/4W,TP,3216	1	PC	SI
R119	2007-000619	R-CHIP	24ohm,5%,1/4W,TP,3216	1	PC	SI
R114	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R115	2007-000924	R-CHIP	470Kohm.1%.1/4W.TP.3216	1	PC	SI
R116	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R117	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R613	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R617	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R618	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R619	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R620	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R621	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R622	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	SI
R623	2007-000924	R-CHIP	470Kohm,1%,1/4W,TP,3216	1	PC	12
R118	2007-000924	R-CHIP		1	PC	12
			470hm,1%,1/10W,TP,1608	1	PC	SI
R102	2007-000950	R-CHIP	47ohm,5%,1/4W,TP,3216	1	PC	SI
R110	2007-000950	R-CHIP	47ohm,5%,1/4W,TP,3216			-
R112	2007-000950	R-CHIP	47ohm,5%,1/4W,TP,3216	1	PC	12
R405	2007-001118	R-CHIP	680ohm,5%,1/8W,TP,2012	1	PC	12
R408	2007-001118	R-CHIP	680ohm,5%,1/8W,TP,2012	1	PC	SN

ocation	Code	Description	Spec.	Q`ty	Unit	S
R107	2007-007342	R-CHIP	1.82Kohm,1%,1/10W,TP,1608	1	PC	S
R106	2007-007445	R-CHIP	9.09Kohm,1%,1/10W,TP,1608	1	PC	S
R810	2007-007735	R-CHIP	91ohm,1%,1/10W,TP,1608	1	PC	9
R601	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	2
R602	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	
R603	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	
R604	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	
R605	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	
R606	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	
R607	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	1
R608	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	1
R609	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	1
R610	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	1
R611	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	
R612	2007-008023	R-CHIP	100Kohm,5%,1W,TP,6432	1	PC	1
C303	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	!
C317	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	1
C318	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	
C327	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	1
C400	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	1
C402	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	
C500	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	1
C501	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	
C502	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	
C504	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	
C505	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	
C814	2203-000257	C-CER,CHIP	10nF,10%,50V,X7R,TP,1608	1	PC	
C301	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	1
C302	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	-
C309	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C313	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C316	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C600	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C601	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C700	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C700	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	1
C702	2203-000440	C-CER,CHIP	. , , , ,	1	PC	1
			1nF,10%,50V,X7R,TP,1608 1nF,10%,50V,X7R,TP,1608		PC	1
C705 C801	2203-000440	C-CER,CHIP	. , , , ,	1	PC	+
	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1		:
C805	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C809	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C815	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	-
C817	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C818	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	
C819	2203-000440	C-CER,CHIP	1nF,10%,50V,X7R,TP,1608	1	PC	-
C319	2203-002002	C-CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1	PC	-
C320	2203-002002	C-CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1	PC	!
C321	2203-002002	C-CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1	PC	
C322	2203-002002	C-CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1	PC	1

Location	Code	Description	Spec.	Q`ty	Unit	SA,
C324	2203-002002	C-CER,CHIP	0.033nF,5%,50V,NP0,TP,1608	1	PC	SNA
C816	2203-002398	C-CER,CHIP	22nF,10%,50V,X7R,1608	1	PC	SN
C100	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN.
C105	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C108	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN.
C110	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C111	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C116	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C118	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C122	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C126	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C200	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C307	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C308	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C310	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C311	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C312	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C312	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C315	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C503	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C608	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C701	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C701	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C800	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C802	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C802	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C804	2203-005249	C-CER,CHIP		1	PC	SN
			100nF,10%,50V,X7R,TP,1608			
C808	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C810	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C812	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C900	2203-005249	C-CER,CHIP	100nF,10%,50V,X7R,TP,1608	1	PC	SN
C404	2203-006104	C-CER,CHIP	1000nF,10%,50V,X7R,TP,3225,2.5T	1	PC	SN
C406	2203-006104	C-CER,CHIP	1000nF,10%,50V,X7R,TP,3225,2.5T	1	PC	SN
C304	2203-006348	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1	PC	SN
C305	2203-006348	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1	PC	SN
C325	2203-006348	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1	PC	SN
C328	2203-006348	C-CER,CHIP	1000nF,10%,25V,X5R,TP,1608	1	PC	SN
X300	2802-001211	RESONATOR-CERAMIC	8MHZ,0.1%,TP,3.2X1.3X0.9 MM	1	PC	SN
IC600	3201-001860	SENSOR MAG	ACS710KLATR-12CB-T,37.5A,-40to+125C,8V	1	PC	SN
IC700	3201-001860	SENSOR MAG	ACS710KLATR-12CB-T,37.5A,-40to+125C,8V	1	PC	SN
IC701	3201-001860	SENSOR MAG	ACS710KLATR-12CB-T,37.5A,-40to+125C,8V	1	PC	SN
PCB	DB41-01033A	PCB MAIN-INVERTER	RC100DHXGA, RC100PHXGA, RC125PHXGA, RC125DHXGA,FR- 4,2,ver 0.8,T1.6,220*195,UB1, UB2,Outdoor,2oz, Inverter Platform #6,60	1	PC	SN
IC201	DB91-01179A	ASSY-MIC	Global 4 way Outdoor Inverter MICOM,STM-1043-OS, LM3S817, 48LQFP, ROM 64KB	1	PC	SN
	DB09-00591A	IC MICOM	LM3S817,48,DC3V,50 MHz,LQFP,LQFP,LQFP,-40 ~ 85,64KB,LQFP	1	PC	SN

86 Samsung Electronics

RC160MHXGA_SM_E_34513A(1)_5~8.indd 86 2012-08-07 4:31:32

EMI PCB

Location	Code	Description	Spec.	Q`ty	Unit	SA,
	DB93-11111A	ASSY PCB SUB-EMI	GLOBAL-4WAY OUTDOOR,Inverter Platform #6 3Phase EMI,N	1	PC	SA
ADHESIVE- SILICON	0201-001982	ADHESIVE-SIL	TSE3854DS-W,White,2.2,MIL-A-46146B,UL94V-0	0.01	KG	SN
VA01	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
VA02	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
VA03	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
VA04	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
VA05	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
VA06	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
VA07	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
VA08	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
VA09	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
VA10	1405-001204	VARISTOR	670Vdc,4500A,17x6.3mm,BK	1	PC	SN
R01	2003-002038	R-METAL OXIDE(S)	1Mohm,5%,2W,AA,TP,4x12mm	1	PC	SN
R02	2003-002038	R-METAL OXIDE(S)	1Mohm,5%,2W,AA,TP,4x12mm	1	PC	SN
R03	2003-002038	R-METAL OXIDE(S)		1	PC	SN
			1Mohm,5%,2W,AA,TP,4x12mm		_	-
YC01	2201-000024	C-CERAMIC,DISC	4.7nF,20%,250V,Y5U,TP,16x7mm,7.5mm	1	PC	SN
YC02	2201-000024	C-CERAMIC,DISC	4.7nF,20%,250V,Y5U,TP,16x7mm,7.5mm	1	PC	SN
C11	2201-000153	C-CERAMIC,DISC	10nF,+80-20%,250V,Y5V,-,14.6x6mm,7.5	1	PC	SN
C12	2201-000153	C-CERAMIC,DISC	10nF,+80-20%,250V,Y5V,-,14.6x6mm,7.5	1	PC	SI
C13	2201-000153	C-CERAMIC,DISC	10nF,+80-20%,250V,Y5V,-,14.6x6mm,7.5	1	PC	SI
C14	2201-000153	C-CERAMIC,DISC	10nF,+80-20%,250V,Y5V,-,14.6x6mm,7.5	1	PC	SI
C08	2301-001285	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm	1	PC	SI
C09	2301-001285	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm	1	PC	SI
C10	2301-001285	C-FILM,LEAD-PPF	680nF,10%,275V,BK,31x11x21mm	1	PC	SI
C01	2301-001853	C-FILM,LEAD	2200nF,10%,275V,BK,18X28X31	1	PC	SN
C02	2301-001853	C-FILM,LEAD	2200nF,10%,275V,BK,18X28X31	1	PC	SN
C03	2301-001853	C-FILM,LEAD	2200nF,10%,275V,BK,18X28X31	1	PC	SN
F101-1	3601-001426	USE-CARTRIDGE	500,25A,SLO-BLO,FIBER,10.3x38.1mm	1	PC	SI
F102-1	3601-001426	USE-CARTRIDGE	500,25A,SLO-BLO,FIBER,10.3x38.1mm	1	PC	SI
F103-1	3601-001426	USE-CARTRIDGE	500,25A,SLO-BLO,FIBER,10.3x38.1mm	1	PC	SI
F101	3602-001040	FUSE-CLIP	250,30A,4MOhm	1	PC	SI
F102	3602-001040	FUSE-CLIP	250,30A,4MOhm	1	PC	SI
F103	3602-001040	FUSE-CLIP	250,30A,4MOhm	1	PC	SI
CN01	3711-000203	HEADER-BOARD TO CABLE	1WALL.2P/3P.1R.7.92mm.STRAIGHT.SN.WHT	1	PC	SI
			, , , , , , , , , , , , , , , , , , , ,		PC	H
R-OUT	3712-001139	CONNECTOR TERMINAL	TAB,MALE,6.35x0.8mm	1	_	SI
S-OUT	3712-001139	CONNECTOR TERMINAL	TAB,MALE,6.35x0.8mm	1	PC	SI
T-OUT	3712-001139	CONNECTOR-TERMINAL	TAB,MALE,6.35x0.8mm	1	PC	SI
FT11	DB27-00033A	COIL CHOKE	FILTER,S50,-0%,5A,14mH	1	PC	SI
FT01	DB27-00039A	COIL CHOKE	SSC5122020B,UH140GAV,2mH,+- 20%,50mOHM,18A,Φ51x31x13,14,Φ 51x31x13, PBT,21,2.2,BOX,-25 to +85C	1	PC	SI
FT02	DB27-00039A	COIL CHOKE	SSC5122020B,UH140GAV,2mH,+- 20%,50mOHM,18A,Ф51x31x13,14,Ф 51x31x13, PBT,21,2.2,BOX,-25 to +85C	1	PC	SI
РСВ	DB41-01035A	PCB SUB-EMI	GLOBAL-4WAY OUTDOOR,FR-4,2,ver 2.3,T1.6,130*230,UB1, UB2,Outdoor,Inverter Platform #6 EMI,600	1	PC	12
DSA01	DB47-00016A	POSISTOR	DSA-332MA,2pF MAX,100MOhm,ASM-3500	1	PC	SI
ASSY CW EARTH	DB93-05379F	ASSY CONNECTOR WIRE- EARTH	RC140RHXEA	1	PC	SI
ASSY CW OWER-RSTN	DB93-10811A	ASSY CONNECTOR WIRE-EMI TO TERMINAL POWE	RC160RHXH1	1	PC	12
ASSY CW POWER-TN	DB93-10871A	ASSY CONNECTOR WIRE- POWER	RC160RHXH1	1	PC	SI

PCB Diagram

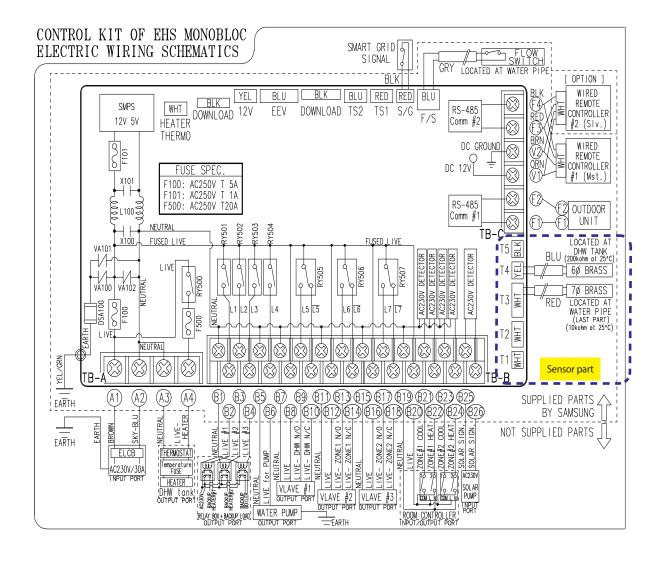
HEATER PCB

REF	Part No.	Spec
CN02	3711-003406	HEADER-BOARD TO CABLE;1WALL,2P,1R,7.92MM,STRAIGHT, (YEL)
CN03	3711-000203	HEADER-BOARD TO CABLE;1WALL,2P/3P,1R,7.92mm,STRAIG (WHT)
FUSE-L	3602-001012	FUSE-BLOCK;500V,-,100MOhm
FUSE-L	3601-000416	250V,1A,FAST-ACTING,GLASS,5.2x20mm
FUSE-N	3602-001012	FUSE-BLOCK;500V,-,100MOhm
FUSE-N	3601-000416	250V,1A,FAST-ACTING,GLASS,5.2x20mm
JP01	DB47-90005A	JUMPER WIRE;TA0.6PI/52MM,P0509-400-108,-,-
VA01	1405-000154	VARISTOR;460Vdc,4500A,17.5x7.5mm,BK,920V,600pF
PCB	DB41-01132A	PCB SUB - HEATER

6. Wiring Diagram

6-1 Hydro unit

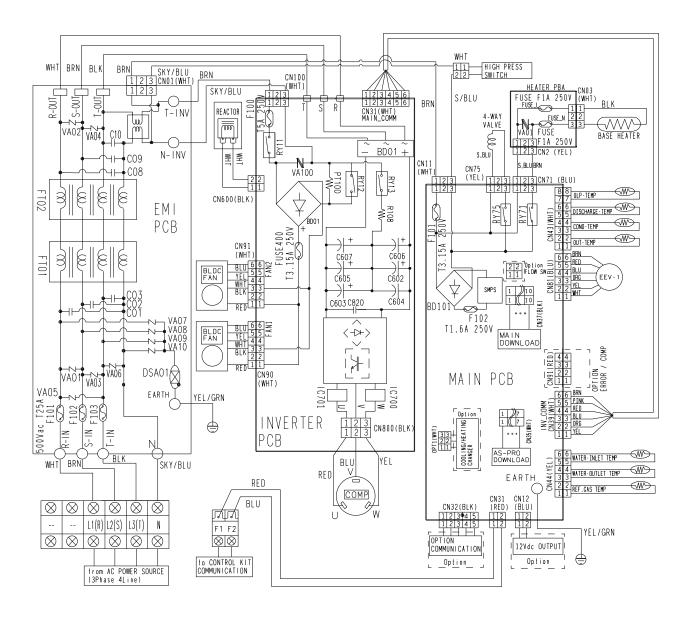
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6-2 Outdoor Unit

3Phase / 2FAN Model Diagram

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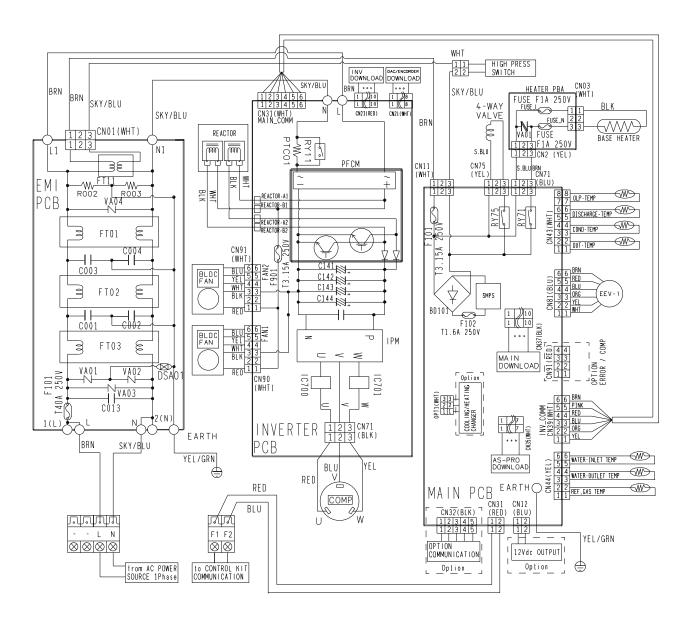


90 Samsung Electronics

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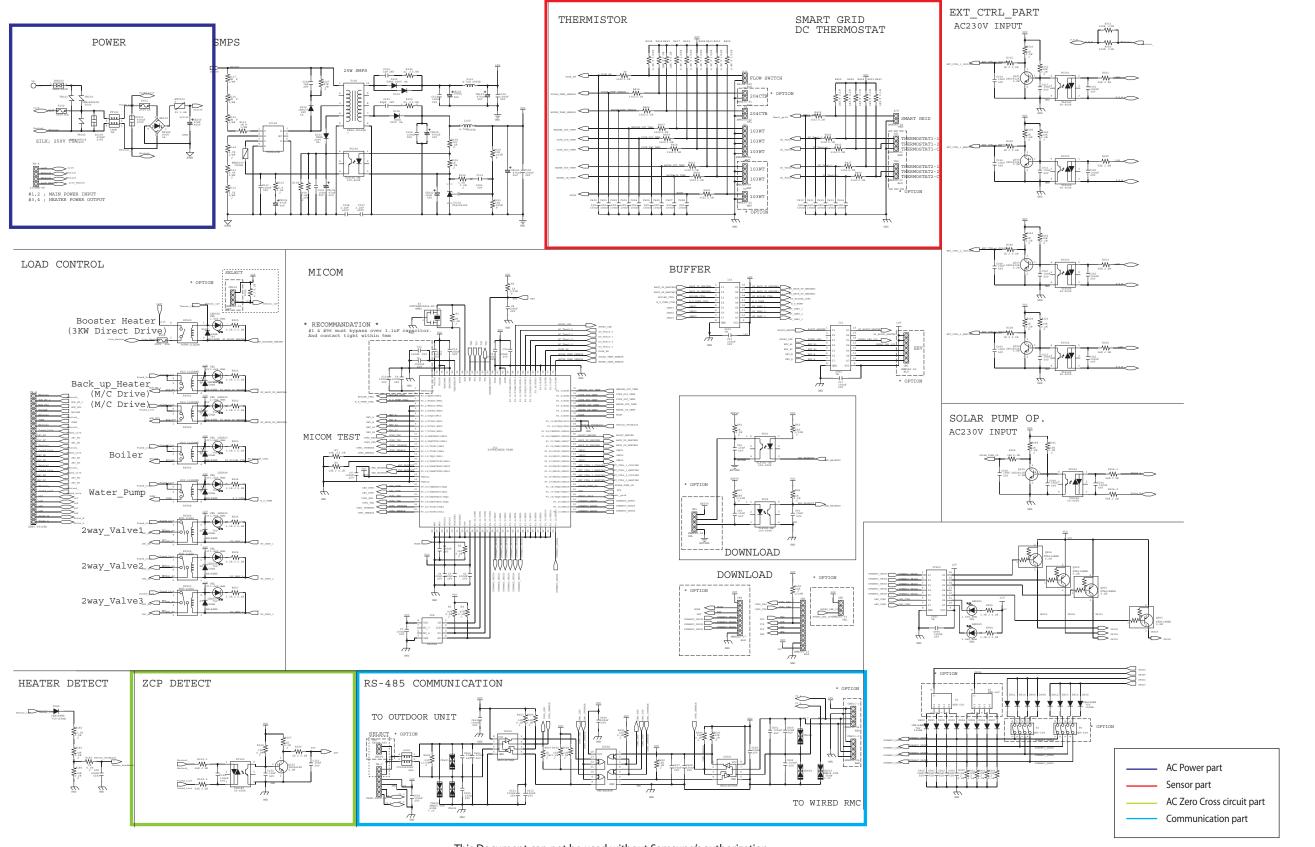
1Phase / 2FAN Model

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7. Schematic Diagram

7-1 Hydro unit



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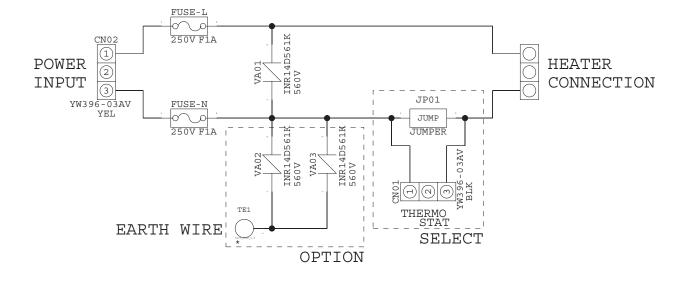
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7-2 Outdoor Unit

HEATER PBA

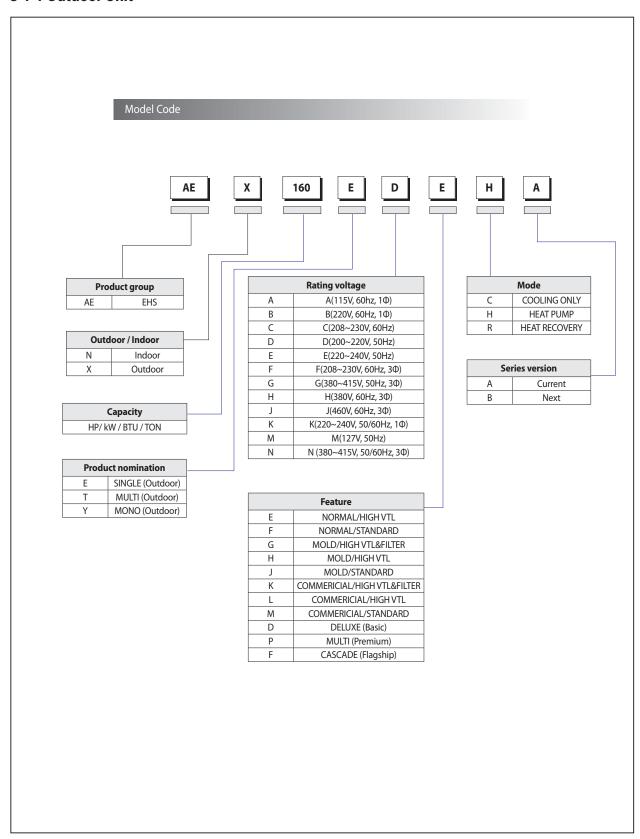
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8. Reference Sheet

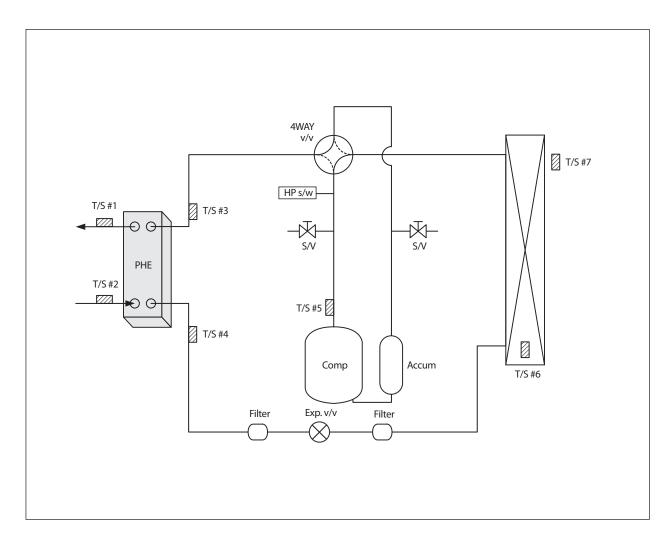
8-1 Index for Model Name

8-1-1 Outdoor Unit



8-2 Refrigerant Circuit Diagram

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Part	Description
PHE	Plate heat exchanger
T/S #1	For water outlet temp sensor
T/S #2	For water inlet temp sensor
T/S #3	For PHE in temp
T/S #4	For PHE out temp
T/S #5	For discharge temp
T/S #6	For cond temp
T/S #7	For ambient temp sensor
S/V	Service valve ¼ inch
Accum	Accumulator



GSPN(Global Service Partner Network)

Area	Web Site
Eurpoe, CIS, Mideast & Africa	gspn1.samsungcsportal.com
Asia	gspn2.samsungcsportal.com
North & Latin America	gspn3.samsungcsportal.com
China	china.samsungportal.com

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